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Short-Term Energy Outlook

Quarterly Projections

Third Quarter 1995

Energy Information Administration
Office of Energy Markets and End Use
U.S. Department of Energy
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Preface

The Energy Information Administration (EIA) prepares quarterly, short-term energy supply, demand, and price projections for publication in February, May, August, and November in the *Short-Term Energy Outlook (Outlook)*. An annual supplement analyzes the performance of previous forecasts, compares recent projections with those of other forecasting services, and discusses current topics related to the short-term energy markets. (See *Short-Term Energy Outlook Annual Supplement*, DOE/EIA-0202.)

The forecast period for this issue of the *Outlook* extends from the third quarter of 1995 through the fourth quarter of 1996. Values for the second quarter of 1995, however, are preliminary EIA estimates (for example, some monthly values for petroleum supply and disposition are derived in part from weekly data reported in the *Weekly Petroleum Status Report*) or are calculated from model simulations using the latest exogenous information available (for example, electricity sales and generation are simulated using actual weather data). The historical energy data, compiled into the third quarter 1995 version of the Short-Term Integrated Forecasting System (STIFS) database, are mostly EIA data regularly published in the *Monthly Energy Review*, *Petroleum Supply Monthly*, and other EIA publications. Minor discrepancies between the data in these publications and the historical data in this *Outlook* are due to independent rounding. The STIFS database is archived quarterly and is available from the National Technical Information Service.

The cases are produced using the Short-Term Integrated Forecasting System (STIFS). The STIFS model is driven principally by three sets of assumptions or inputs: estimates of key macroeconomic variables, world oil price assumptions, and assumptions about the severity of weather. Macroeconomic estimates are produced by DRI/McGraw-Hill but are adjusted by EIA to reflect EIA assumptions about the world price of crude oil, energy product prices, and other assumptions which may affect the macroeconomic outlook.

Treatment of Petroleum Supply Monthly Reporting Change

The Energy Information Administration began reporting the series "Motor Gasoline Product Supplied" (equated in this report with gasoline demand) on a new basis for monthly data for January 1993 forward. These new-basis data are included in this issue of the *Outlook*. The reporting changes reflect data relating to fuel ethanol blended into gasoline as well as certain changes in product classification affecting reported motor gasoline quantities. Beginning with the fourth quarter 1993 edition of the *Outlook*, any references to data series affected by these changes are, for periods prior to 1993, strictly in terms of the new-basis definition. Thus, history for motor gasoline and miscellaneous product demands were restated to make comparisons consistent. Appendix B from the third quarter 1993 *Outlook* provides details on the significance of the data restatement.

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Only Modest Increases Seen for Crude Oil Prices Despite Continued Demand Strength

Although crude oil prices are expected to show an increase of about $1.65 per barrel in 1995 compared to 1994, this movement is seen largely as an adjustment to the low crude oil prices in 1994. Continued world demand growth through 1996 (about 1.6 percent per year) should drive production increases from OPEC and non-OPEC sources. Average 1996 crude oil prices may be slightly above 1995 levels, but no steep increases are anticipated under the base case.

Distillate Prices to Rise This Fall Due to Higher Demand, Lower Stocks

Distillate fuel demand is expected to rise by just over 100,000 barrels per day in fourth quarter 1995 compared to the fourth quarter 1994. Higher demand and more modest stock levels lead to an expected increase in distillate prices this fall, with retail heating oil rising about 7 cents per gallon over the fourth quarter 1994 average.

Natural Gas Prices Expected to Stage Modest Recovery in 1996

Excess natural gas supply in the United States left by the mild 1994-1995 winter should be worked off by year-end, but is expected to result in a decrease of 8 percent in the annual average wellhead price this year compared to 1994. This decline should be reversed in 1996, assuming normal weather for next winter. The price recovery may be limited, however, by the enhancement of natural gas productive capacity over the next year and a half.

Natural Gas Storage Surplus is Diminishing

Low heating demand due to the mild temperatures of this past winter has resulted in relatively high natural gas storage levels, which at the end of the season were estimated to be 385 billion cubic feet higher than in 1994. However, a slower rate of storage injection this summer has reduced the storage surplus to 85 billion cubic feet on July 1 compared with July 1, 1994, and gas storage levels should be close to the 1994 level in the second half of 1995.

Gasoline Demand Growth Remains Solid; Efficiency Improvements Slipping

First quarter 1995 highway travel grew by 3.8 percent over last year's level, although some of this increase reflected the effects of poor driving conditions in January and February 1994. For the year, travel demand growth will not remain so robust but is expected to average 2.6 percent in 1995 and 1996. Meanwhile, the average miles per gallon achieved by the average car on the road appears to be growing at less than one percent per year, leading to record gasoline consumption levels.

Nuclear and Hydropower Generation of Electricity Rising Rapidly in 1995

Growing demand for electricity will primarily be met by increases in nuclear and hydroelectric generation in 1995, edging out fossil fuel generation, particularly in the utility sector. Normal precipitation in the Northwest has improved water conditions after the drought of the past few years. In 1996, however, continued growth in the demand for electricity is expected to be met largely by coal since hydroelectric growth is expected to be down from 1995 levels.

Table HL1. U.S. Energy Supply and Demand Summary

	Price Case [a]	Year				Annual Percentage Change		
		1993	1994	1995	1996	1993-1994	1994-1995	1995-1996
Real Gross Domestic Product (GDP)								
(billion 1987 dollars - SAAR)	Mid	**5135**	**5344**	*5483*	*5582*	**4.1**	*2.6*	*1.8*
Imported Crude Oil Price	Low			*16.22*	*14.34*		*4.5*	*-11.6*
(nominal dollars per barrel)	Mid	**16.15**	**15.52**	*17.17*	*17.75*	**-3.9**	*10.6*	*3.4*
	High			*18.11*	*21.17*		*16.7*	*16.9*
Petroleum Supply								
Crude Oil Production [b]	Low			*6.47*	*6.05*		*-2.9*	*-6.5*
(million barrels per day)	Mid	**6.85**	**6.66**	*6.53*	*6.29*	**-2.8**	*-2.0*	*-3.7*
	High			*6.56*	*6.42*		*-1.5*	*-2.1*
Total Petroleum Net Imports (including SPR)	Low			*8.30*	*9.07*		*3.1*	*12.5*
(million barrels per day)	Mid	**7.62**	**8.05**	*8.22*	*8.69*	**5.6**	*2.1*	*5.7*
	High			*8.16*	*8.43*		*1.4*	*3.3*
Energy Demand								
World Petroleum	Mid	**66.6**	**67.5**	*68.5*	*69.7*	**1.4**	*1.5*	*1.8*
Petroleum	Low			*17.84*	*18.28*		*0.7*	*2.5*
(million barrels per day)	Mid	**17.24**	**17.72**	*17.81*	*18.13*	**2.8**	*0.5*	*1.8*
	High			*17.78*	*17.99*		*0.3*	*1.2*
Natural Gas	Low			*21.29*	*21.77*		*2.7*	*2.3*
(trillion cubic feet)	Mid	**20.29**	**20.73**	*21.30*	*21.84*	**2.2**	*2.7*	*2.5*
	High			*21.30*	*21.89*		*2.7*	*2.8*
Coal								
(million short tons)	Mid	**932**	**938**	*946*	*961*	**0.6**	*0.9*	*1.6*
Electricity (billion kilowatthours)								
Utility Sales [c]	Mid	**2861**	**2921**	*2982*	*3028*	**2.1**	*2.1*	*1.5*
Nonutility Own Use [d]	Mid	**138**	**144**	*147*	*155*	**4.3**	*2.1*	*5.4*
Total	Mid	**2999**	**3065**	*3130*	*3183*	**2.2**	*2.1*	*1.7*
Adjusted Total Energy Demand [e]								
(quadrillion Btu)	Mid	**86.9**	**89.0**	*90.5*	*92.3*	**2.5**	*1.6*	*2.0*
Adjusted Total Energy Demand per Dollar of GDP								
(thousand Btu per 1987 Dollar)	Mid	**16.93**	**16.66**	*16.51*	*16.53*	**-1.6**	*-0.9*	*0.1*
Renewable Energy as Percent of Total	Mid	**6.9**	**7.2**	*7.1*	*7.4*			

[a]Refers to the imported cost of crude oil to U.S. refiners assumed for the scenario depicted. In all cases on this table, the mid macroeconomic case and normal weather are used.

[b]Includes lease condensate.

[c]Total annual electric utility sales for historical periods are derived from the sum of monthly sales figures based on submissions by electric utilities of Form EIA-826, "Monthly Electric Utility Sales and Revenue Report with State Distributions." These historical values differ from annual sales totals based on Form EIA-861, reported in several EIA publications, but match alternate annual totals reported in EIA's *Electric Power Monthly*, DOE/EIA-0226.

[d]Defined as the difference between total nonutility electricity generation and sales to electric utilities by nonutility generators, reported on Form EIA-867, "Annual Nonutility Power Producer Report." Data for 1994 are estimates.

[e]The gross energy concept shown here is revised to match that presented in Energy Information Administration, *Annual Energy Review 1993 (AER)*, DOE/EIA-0384(93), Table 10.1. The conversion from physical units to Btu is calculated using a subset of conversion factors used in the calculations performed for gross energy consumption in Energy Information Administration, *Monthly Energy Review* (*MER*). Consequently, the historical data may not precisely match that published in the *MER* or the *AER*.

SPR: Strategic Petroleum Reserve.

SAAR: Seasonally-adjusted annualized rate.

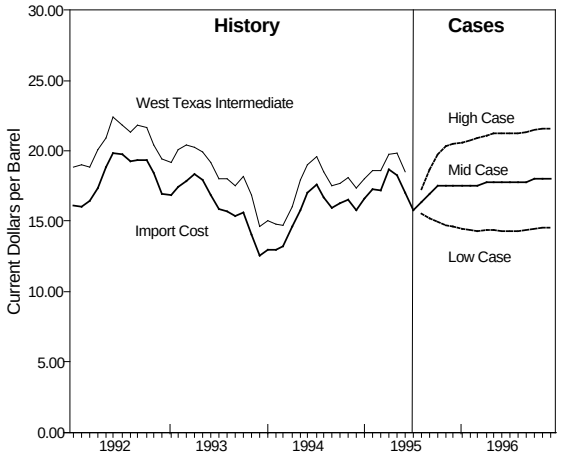
Notes: Minor discrepancies with other published EIA historical data are due to independent rounding. Historical data are printed in bold, forecasts are in italic. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(95/06); *Petroleum Supply Monthly*, DOE/EIA-0109(95/06); *Petroleum Supply Annual 1993*, DOE/EIA-0340(93)/2; *Natural Gas Monthly*, DOE/EIA-0130(95/06); *Electric Power Monthly*, DOE/EIA-0226(95/05); and *Quarterly Coal Report*, DOE/EIA-0121(95/1Q). Macroeconomic projections are based on DRI/McGraw-Hill Forecast CONTROL0695.

The Outlook

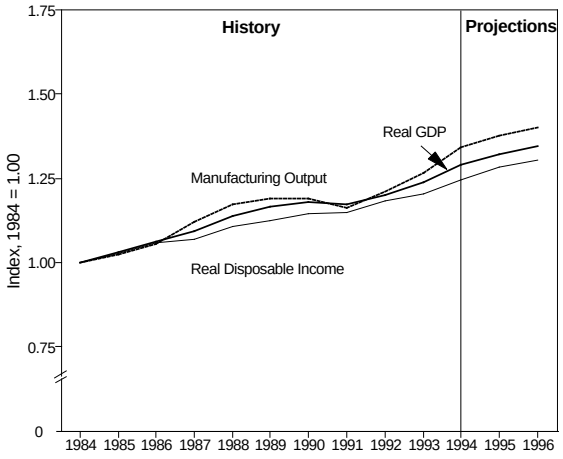
Outlook Assumptions

Figure 1. U.S. Monthly Crude Oil Prices



Sources: Third Quarter 1995 STIFS database and Energy Information Administration, Energy Markets and Contingency Information Division. Details provided in Figure References Section, p. 42.

Figure 2. U.S. Macroeconomic Indicators



Mid World Oil Price Case

Sources: Third Quarter 1995 STIFS database, U.S. Commerce Department, and Federal Reserve Board. Details provided in Figure References section, p. 42.

World Oil Prices

- Three price scenarios are addressed here, as significant uncertainty surrounds the world oil market. In the mid-price case, the world oil price (the average cost of imported crude for U.S. refiners), is expected to rise to $18.00 in the fourth quarter 1996 from an estimated $16.33 per barrel in third quarter 1995 (Figure 1 and Table 4).

- The low-price scenario (declining to $14.34 per barrel in 1996) assumes that growth in world oil demand is minimal due to a worldwide recession, and/or oversupply in world oil markets.

- The high-price scenario (world oil price rises to close to $21.17 per barrel by late 1996) assumes that world oil demand increases, or supply shortfalls, cause stocks to be drawn down, resulting in a tight market situation.

Economic Outlook

- The economy is expected to grow by 2.6 percent in 1995, slowing to 1.8 percent in 1996, as increases in prices and interest rates continue to affect investment. Private consumption is the major contributor towards GDP growth (Figure 2 and Table 1).

- Consumer prices are expected to increase by 3.1 percent in 1995 and 3.3 percent in 1996 (Table 2). Due to increased demand for labor, wage inflation begins to rise by mid-1995 but growth in labor costs is not expected to exceed growth in consumer prices. Higher prices and slower employment gains in 1996 dampen gains in disposable income, which rises by 3.1 percent in 1995 and 1.6 percent in 1996.

- Growth in manufacturing production mirrors expected GDP growth, slowing to 2.6 percent in 1995 and 1.9 percent in 1996, compared to the robust 1994 growth of 6.0 percent.

Weather Assumptions

- Heating and cooling degree-days are assumed normal in the forecast period (beyond June 1995). For 1995, peak-period cooling demand and fourth quarter heating demand are likely to exceed 1994 levels (Table 1).

Special Assumptions for Environmental, Tax, and Other Energy-Related Policies

This section summarizes the potential impacts of current legislative actions on the short-term energy forecasts for the United States, and shows how these impacts are incorporated in this *Outlook*. The impacts are anticipated to directly affect energy prices, consumption, or production.

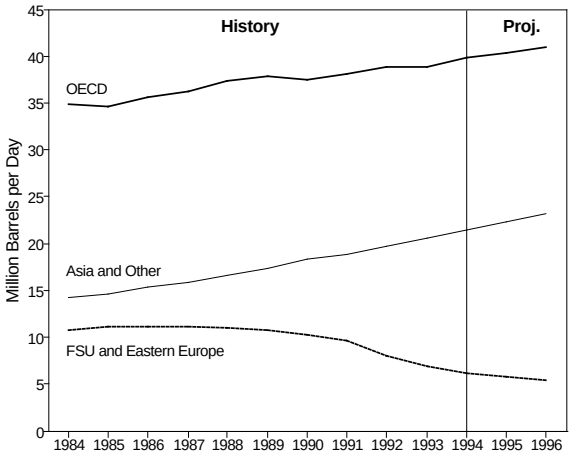
Effective Date	Policy Description	Impact on Forecast
Autumn 1993	FERC Order 636-A implemented, restructuring the way pipelines determine rates, and separating pipeline sales and transportation services.	Market-driven changes will continue. Reliance on stored natural gas for peak demand likely to rise, but pricing expected to be more competitive.
October 1993	Motor Fuel Tax Increase	Federal excise tax increase of 4.3 cents per gallon for motor gasoline and diesel fuel, and 48.5 cents per thousand cubic feet for compressed natural gas used in motor vehicles.
	Federal low-sulfur standard for on-highway use.	After temporary price hikes and spot shortages, the rule has added about 1-2 cents per gallon to the price of diesel fuel.
October 1994	1995-1996 winter will be third season for oxygenated gasoline, required to be sold in carbon monoxide nonattainment areas during winter months.	Motor gasoline prices expected to be 3 to 5 cents per gallon higher in the nonattainment areas, compared with other regions, raising national prices by an average of 1 to 2 cents per gallon during winter months.[1]
January 1995	Phase I reformulated gasoline in 9 high-ozone cities plus opt-in areas.	Approximately 4 to 6 cents per gallon higher cost in affected cities.[2]
	Phase I reduction in sulfur dioxide emissions from electric utility steam generation units fired by fossil fuels, by a system of tradeable allowances, switching or blending with lower sulfur fuels, and retrofitting with scrubbers.	Electricity prices will be slightly higher than would otherwise be the case.
October 1995	Commercial Air Transportation Tax	Federal excise tax of 4.3 cents per gallon of motor fuel is applied to jet fuel used in commercial aviation.

[1] Energy Information Administration, "Demand, Supply, and Price Outlook for Oxygenated Gasoline, Winter 1992-1993", *Monthly Energy Review*, DOE/EIA-0035(92/08), (Washington, DC, August 1992), pp. 5 and 9.

[2] Energy Information Administration, "The Energy Administration's Assessment of Reformulated Gasoline", SR/OOG/94-01/1, (Washington DC, October 1994), p. 56.

International Oil Demand

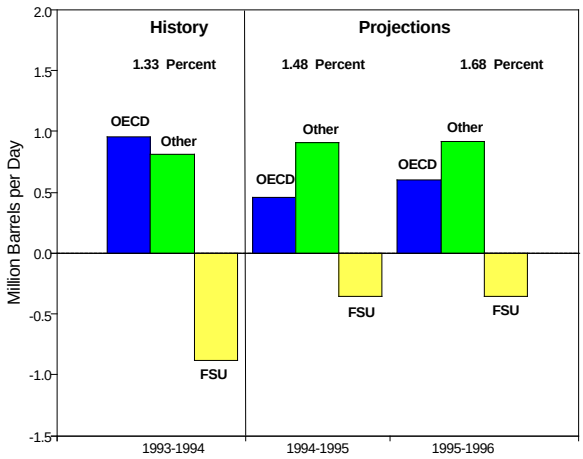
Figure 3. World Petroleum Demand



Mid World Oil Price Case

Sources: Energy Information Administration, Energy Markets and Contingency Information Division. Details provided in Figure References Section, p. 42.

Figure 4. World Oil Demand Changes by Region



Mid World Oil Price Case

Sources: Energy Information Administration, Energy Markets and Contingency Information Division. Details provided in Figure References Section, p. 42.

- World oil demand is expected to rise by 1 million barrels per day in 1995 and an additional 1.1 million barrels per day in 1996, after increasing by 900,000 barrels per day in 1994 (Table 3 and Figure 3). This development reflects continued oil demand growth in the developing world[1] and a smaller decline in demand in the former Soviet Union (FSU). After declining by about 900,000 barrels per day in 1994, oil demand in the FSU is expected to decline by about 400,000 barrels per day or less in 1995 and in 1996. As these countries attempt to move toward Western-style economies, oil demand should decline by a smaller amount each succeeding year.

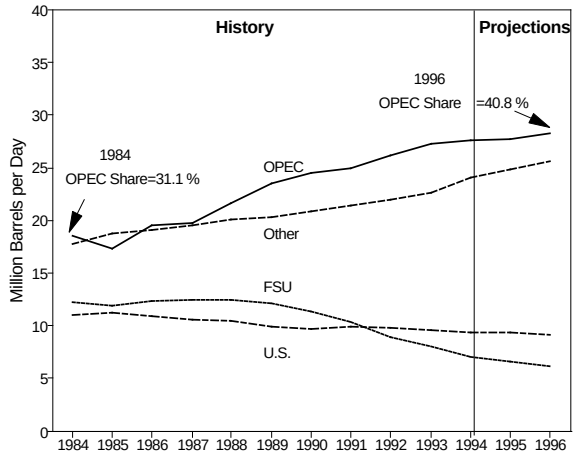
- Oil demand in countries of the Organization for Economic Cooperation and Development (OECD) is expected to increase by nearly 500,000 barrels per day in 1995 (Figure 4), with nearly all of the increase coming from outside the United States. In 1996, OECD demand is expected to grow by an additional 600,000 barrels per day, with over half of the increase coming from the United States.

- Oil demand in China and Other Asia is expected to increase by 5 to 6 percent in 1995 and 1996 as the economies of many of these countries continue to grow by 6 to 10 percent or more each year. In Africa and Latin America[2], oil demand is estimated to grow by only 1.5 to 2.5 percent in 1995 and 1996, while in the Middle East, oil demand is expected to increase by 4 percent per annum in both 1995 and 1996.[3]

- After rising by nearly 800,000 barrels per day in 1994, oil demand in the non-OECD countries, excluding the FSU and non-OECD Europe, is expected to rise by an average of 900,000 barrels per day in 1995 and 1996 (Figure 4). Oil demand in these countries continues to increase substantially each year as robust economic growth continues.

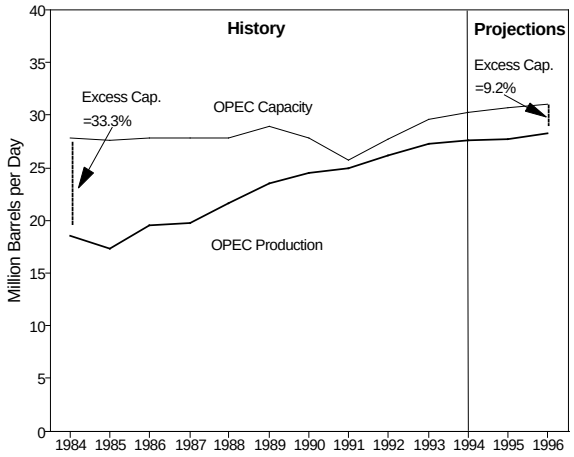
- The anticipated effect of the assumed rates of economic growth in the OECD and in the developing countries, combined with a slower decline rate in the economies of the FSU, is a 2.1 million barrels per day increase in world oil demand between 1994 and 1996 (Table 3).

Figure 5. World Oil Production



Mid World Oil Price Case
Sources: Energy Information Administration, Energy Markets and Contingency Information Division. Details provided in Figure References Section, p. 42.

Figure 6. OPEC Oil Production and Capacity



Mid World Oil Price Case
Sources: Energy Information Administration, Energy Markets and Contingency Information Division. Details provided in Figure References Section, p. 42.

- Following an increase of 500,000 barrels per day in 1994, world oil supply is expected to increase by another 400,000 barrels per day in 1995, and by 700,000 barrels per day in 1996 (Table 3 and Figure 5).

- More than half of the increase between 1994 and 1996 will come from the Organization of Petroleum Exporting Countries (OPEC). OPEC production is expected to increase by 200,000 barrels per day in 1995, and by about 500,000 barrels per day in 1996. As a result, OPEC's market share begins an upward track in 1996.

- Petroleum production in the North Sea is expected to increase by over 300,000 barrels per day in 1995, and by another 400,000 barrels per day in 1996. Production by non-OPEC developing countries is expected to rise by over 300,000 barrels per day in 1995 and another 300,000 barrels per day in 1996.

- U.S. production is expected to continue declining, falling by about 300,000 barrels per day in the two-year period 1994 to 1996.

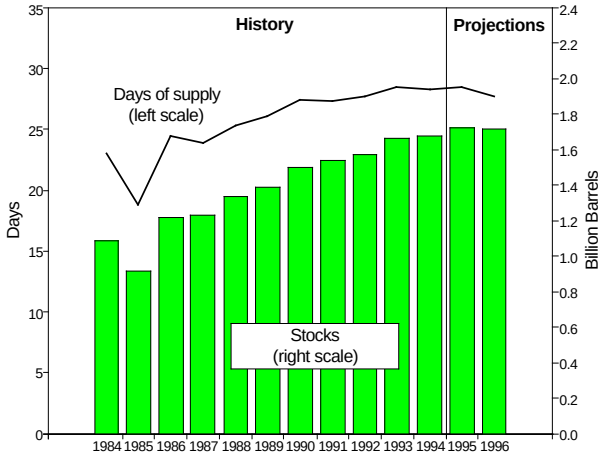
- In the FSU, petroleum production is expected to continue to fall, albeit at an attenuated rate compared to recent years. Following a nearly 1.1 million barrel per day decline in 1994, oil production is expected to decline by over 400,000 barrels per day in 1995, and by nearly another 400,000 barrels per day in 1996.

- With OPEC production projected to increase significantly in 1996, excess OPEC production capacity is expected to decrease in 1996 as capacity increases less than production (Figure 6).

- Average OPEC excess production capacity (excluding Iraq) is expected to be 3.0 million barrels per day in 1995, and only 2.8 million barrels per day in 1996. Most of the excess capacity in 1996 is in Saudi Arabia (1.9 million barrels per day), Kuwait (200,000 barrels per day), Iran (200,000 barrels per day), and the United Arab Emirates (200,000 barrels per day).[4]

World Oil Stocks and Net Trade

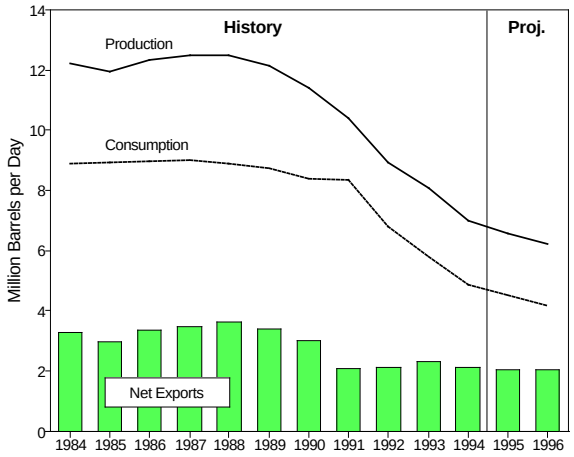
Figure 7. Market Economies' Commercial Oil Stocks



Mid World Oil Price Case

Sources: Energy Information Administration, Energy Markets and Contingency Information Division. Details provided in Figure References Section, p. 42.

Figure 8. FSU Oil Output, Demand, and Net Exports



Mid World Oil Price Case

Sources: Energy Information Administration, Energy Markets and Contingency Information Division. Details provided in Figure References Section, p. 42.

- With petroleum stock levels in the Market Economies (which exclude the former centrally planned economies) increasing each year since 1986, this *Outlook* projects that stock levels will continue to increase again in 1995, before stabilizing in 1996 (Figure 7).

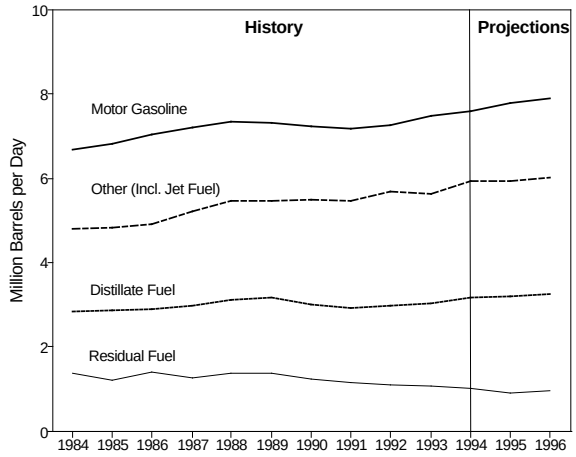
- "Days of Supply" is the number of days of consumption that can be supplied by non-government stocks above the minimum operating level. Because consumption is expected to increase significantly while stocks are expected to remain relatively stable, the "Days of Supply" is expected to decline by the end of 1996. However, this measure would still remain at adequate levels through the forecast, as end-1996 levels are expected to be similar to end-1992 levels.

- Net exports from the FSU are estimated to stabilize at 2.1 million barrels per day in 1995 and 1996 (Figure 8 and Table 3). This reflects the expectation that the decline in consumption expected over the forecast period will be mostly counterbalanced by production losses.

- Since exports of petroleum are a major source of hard currency for the FSU, a strong incentive in maintaining exports, net oil exports from the FSU are expected to remain relatively stable.

- If, however, oil production in the FSU decreases by more than estimated in this forecast, this could add significantly to production requirements in OPEC. The situation in the FSU is one of the main wildcards in the world oil market over the next 2 years.

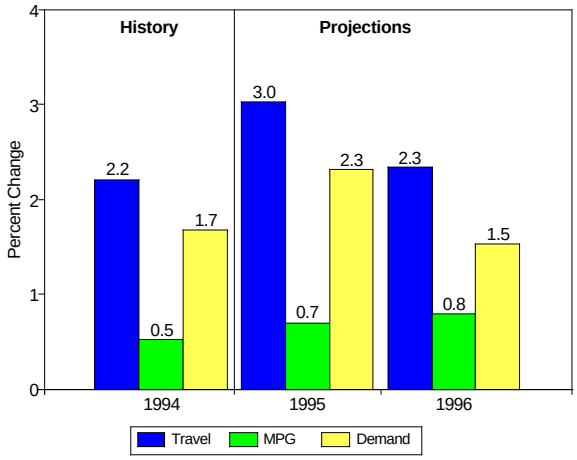
Figure 9. U.S. Petroleum Demand



Mid World Oil Price Case

Sources: Third Quarter 1995 STIFS database. Details provided in Figure References Section, p. 42.

Figure 10. Gasoline Market Indicators



Mid World Oil Price Case

Sources: Third Quarter 1995 STIFS database. Details provided in Figure References Section, p. 42.

- U.S. petroleum demand is projected to rise by 90,000 barrels per day, or 0.5 percent, in 1995 (Figure 9 and Table 6), and a further 200,000 barrels per day, or 1.8 percent, in 1996.

- In the first half of 1995, oil demand declined by 190,000 barrels per day as mild first quarter weather in the Northeast depressed oil demand, and excess supply and low prices for natural gas resulted in conditions more favorable to gas use in the industrial and utility sectors. For the rest of 1995, significant growth is expected due to strength in transportation fuels (Figure 10) and recovery in residual fuel oil demand. In 1996, oil demand growth is projected to exceed that of 1995 due to strength in transportation fuels and presumed normal weather patterns, and continued recovery in residual fuel oil markets as excess gas supplies are reduced.

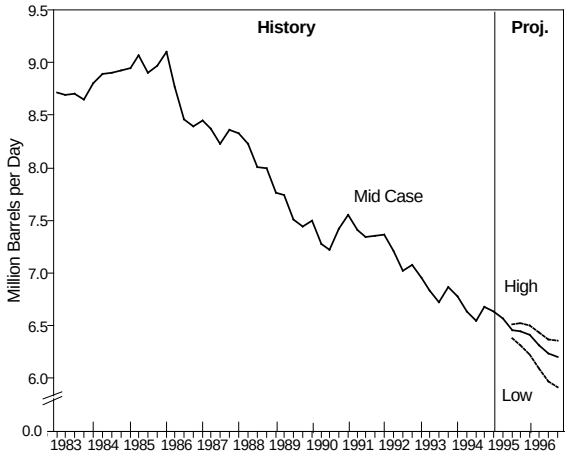
- Motor gasoline demand is projected to increase 2.3 percent in 1995 in response to a 3.0 percent increase in highway travel. The resultant increase in efficiency of only 0.7 percent reflects the continued shift towards less fuel-efficient vehicles (minivans, light trucks, sports utility vehicles) and implementation of RFG regulations. In 1996, demand is projected to increase 1.5 percent as highway travel growth moderates to 2.3 percent.

- Looking forward to the fall quarter, distillate fuel demand is expected to rise by just over 100,000 barrels per day compared to the fourth quarter 1994, which was a mild quarter weatherwise. Primary distillate fuel stocks are currently below the level seen last year at this time, and suppliers are expected to avoid the extensive overstocking seen last fall. Higher demand and more modest stock levels lead to an expected increase in distillate prices this fall, with retail heating oil rising about 7 cents per gallon over the fourth quarter 1994 average.

- Although significant reductions in residual fuel oil use at electric utilities have been seen as nuclear power plants have increased output amidst pockets of relatively weak demand for electricity (partly due to weather conditions), some increases in heavy fuel oil use for electricity generation are anticipated as hydroelectric output growth slows in 1996.

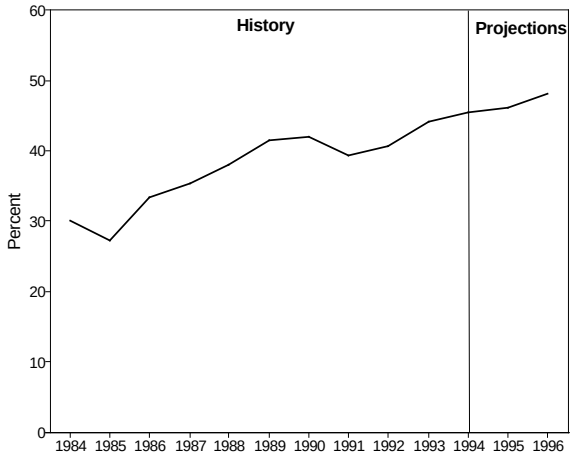
U.S. Oil Supply

Figure 11. U.S. Crude Oil Production



Sources: Third Quarter 1995 STIFS database and Energy Information Administration, Reserves and Natural Gas Division. Details provided in Figure References Section, p. 42.

Figure 12. U.S. Net Oil Imports' Share of Demand



Sources: Third Quarter 1995 STIFS database. Details provided in Figure References Section, p. 42.

- At mid-case prices, total U.S. domestic crude oil production is expected to decline by 130,000 barrels per day (2.0 percent) in 1995, and by an additional 240,000 barrels per day (3.7 percent) in 1996 (Table 6 and Figure 11).

- Oil production in the lower 48 States is expected to drop by 70,000 barrels per day in 1995, and by 110,000 barrels per day in 1996. Oil production from new projects in Federal offshore waters (the Santa Ynez unit in the Pacific, the Auger project in the Gulf of Mexico, and the Point Arguello Field in the Pacific) are expected to account for about 3.8 percent of total U.S. oil production by the end of 1996.[5]

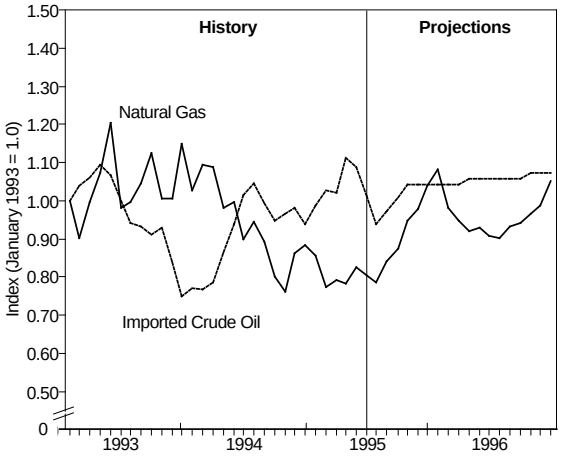
- Oil production in Alaska is expected to decline by 4.5 percent in 1995, and by another 8.1 percent in 1996. Installation of additional gas handling facilities in the giant Prudhoe Bay oil field is complete and no major investments are planned for this field during the forecast period. The Point McIntyre Field is expected to produce about 135,000 barrels per day, and the Niakuk Field is expected to produce about 25,000 barrels per day during the forecast.[6]

- Crude oil production could be as high as 6.4 million barrels per day by the fourth quarter of 1996, given the high price case (Table 7) and production from new projects in the Federal Offshore, or as low as 5.9 million barrels per day under the low price scenario (Table 5).

- Declining oil production and rising demand in the United States means an increase in net imports of crude oil and products of 640,000 barrels per day between 1994 and 1996. Total net imports should equal 48.0 percent of total petroleum demand in 1996 in the base case (Figure 12). The net import share of demand could range between 50 and 47 percent depending on where actual oil prices land in the low to high price range (Tables 5 and 7).

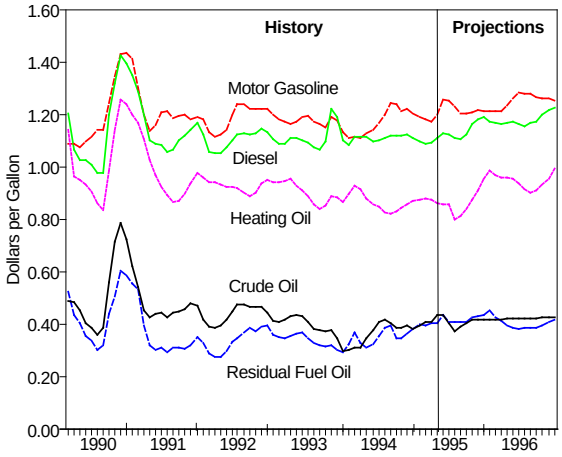
- According to Baker Hughes, Inc., the rig count for 1994 averaged 774. The rig count is expected to decline to an average of 721 in 1995, but is expected to increase to 777 in 1996.[7]

Figure 13. U.S. Oil and Gas Prices



Mid World Oil Price Case
Sources: Third Quarter 1995 STIFS database. Details provided in Figure References Section, p. 42.

Figure 14. Petroleum Product Prices



Mid World Oil Price Case
Sources: Third Quarter 1995 STIFS database. Details provided in Figure References Section, p. 42.

- World oil prices rose in the second quarter of 1995 (Figure 13). This was due not only to market uncertainty stemming from the imposition of a U.S. embargo on Iranian oil and Iraq's rejection of the U.N.'s conditions for lifting sanctions, but also because of record increases in demand for motor gasoline in the U.S in April and May. Natural gas prices, on the other hand, were 20 percent lower in the first half of the year than year-earlier levels, due to mild winter and spring weather and continued improvements in market efficiency. The first quarter 1995 wellhead price for natural gas was nearly 25 percent lower than the price in the previous year.[8]

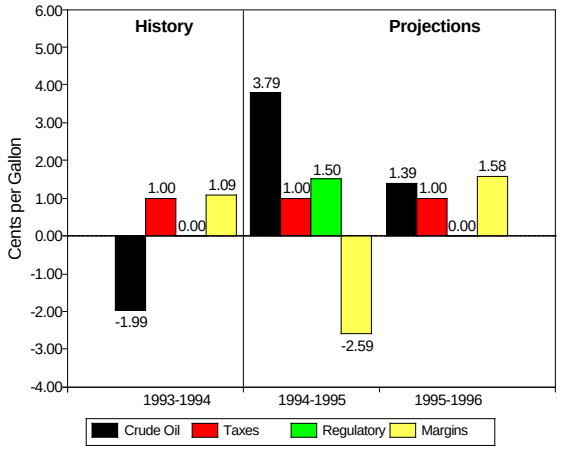
- In the first quarter of 1995, operating income for domestic oil producers improved after several quarters of declining income. Major companies reported increases in domestic upstream income of about 21 percent, while independents' operating profits from oil and gas production decreased by 59 percent over the same period.[9] Despite the increase in oil prices during the first quarter of 1995, depressed gas prices are likely to leave the domestic oil and gas industry with mixed results for the year.

- From the 1994 average of $15.57 per barrel, crude oil prices are expected to rise about $1.65 per barrel in 1995 in response to increases in world demand. This projected increase in world demand results in tighter supplies and an increase of world oil prices. Thus, in the base case, the world oil price is projected to rise by $1.67 per barrel from the third quarter 1995 through the end of 1996. (see Table 4 and "Outlook Assumptions," p.4).

- Assuming normal weather for the upcoming winter, natural gas wellhead prices should recover from the low prices of last winter. The projected 1995-96 winter price should average about $1.94 per thousand cubic feet (Table 4).

- Most petroleum product prices, with the exception of heating oil, are expected to increase in 1995. Much of the rise is attributable to higher crude oil acquisition costs (Figure 14).

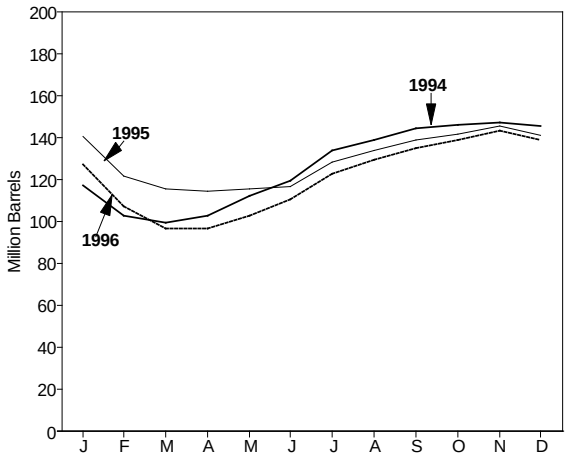
Figure 15. Motor Gasoline Price Components (Year-to-Year Change)



Mid World Oil Price Case

Sources: Third Quarter 1995 STIFS database. Details provided in Figure References Section, p. 42.

Figure 16. Distillate Inventories



Mid World Oil Price Case

Sources: Third Quarter 1995 STIFS database. Details provided in Figure References Section, p. 42.

- The jump in residual fuel oil prices in the first half of 1995 was due to higher crude oil prices and tight supplies as higher European demand has pushed up prices on the world market. The high prices are projected to continue through the year, but then decline in 1996, as the tight supply situation diminishes.

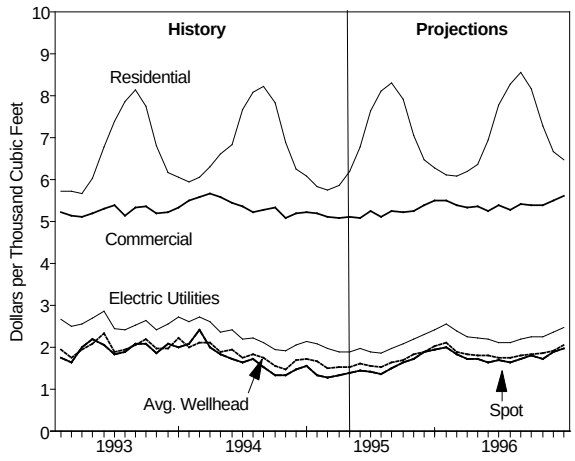
- Other major petroleum product prices will probably continue to increase in 1996, assuming normal weather. In 1995, after peaking in the second quarter, gasoline prices are expected to be about 3.0 percent above the 1994 average. Another 3.0 percent increase is expected in 1996. The rise is due to higher crude costs, the increased costs of reformulated gasoline (1-2 cents per gallon nationally), and to higher demand (Figure 15).

- The additional costs associated with reformulated gasoline have stabilized, and average about 4 cents per gallon compared with 1 to 2 cents per gallon in April 1995, when the market was just emerging and reformulated gas was over-supplied.[10]

- Residential heating oil prices were weakened last winter due to the exceptionally mild weather, which ended with high inventories (Figure 16). As a result, the average price for 1995 is expected to be little changed from the previous year, even as crude oil prices are projected to be 4 cents per gallon higher. However, heating oil prices should rebound strongly in 1996, averaging 97 cents per gallon in the winter quarters if the weather returns to normal levels. Another warm winter like last year's, on the other hand, could result in prices 7 cents per gallon lower (Table 4).

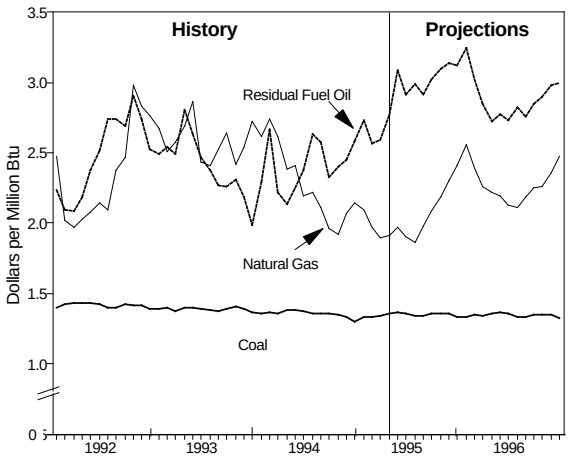
- Diesel fuel oil prices, which are related to heating oil prices, are projected to increase by an average of 7 cents per gallon from 1994 through 1996. About 5 cents of this expected increase can be attributed to higher crude oil costs, 1 cent to low sulfur requirements, and the remainder to higher demand.

Figure 17. Natural Gas Prices by Sector



Mid World Oil Price Case
Sources: Third Quarter 1995 STIFS database. Details provided in Figure References Section, p. 42.

Figure 18. Fossil Fuel Prices to Electric Utilities



Mid World Oil Price Case
Sources: Third Quarter 1995 STIFS database. Details provided in Figure References Section, p. 42.

- First quarter 1995 net income for the U.S. majors' domestic downstream operations fell by 97 percent from the previous year, while independent refiners' income grew by about $225 million.[11] Gross refiner margins should rise over the next 2 years, but refiner net income may not increase significantly if reformulated gasoline and low sulfur diesel costs prove difficult to fully recover.

- Natural gas prices are expected to retain then advantage over heavy oil prices at electric utilities through 1996. However, the wide difference in 1995 (as residual prices have been bid up due to European demand), should decrease in 1996, as residual fuel prices are expected to follow the relatively stable crude oil price path while gas prices rebound.

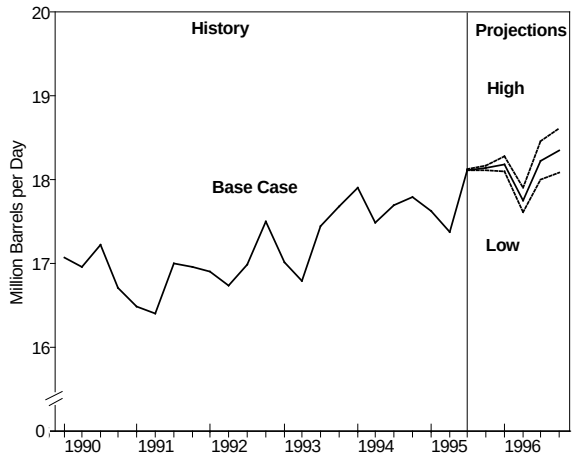
- The expected net effect of the mild winter on natural gas wellhead prices in the first quarter of this year is a decrease in the average 1995 price by 14 cents per thousand cubic feet (Figure 17 and Table 4). Spot natural gas wellhead prices bottomed out at $1.34 per thousand cubic feet in February, rose about 15 cents by mid-June,[12] but have since fallen back to February levels as underground storage levels are expected to be more than adequate for the upcoming heating season.[13]

- In 1996, assuming a normal winter, the natural gas wellhead price is projected to increase by 20 cents per thousand cubic feet (Table 4). Much of the 1996 change is related to the depressed gas prices in the first half of 1995. In addition, the expected higher world oil price in 1996 and growing natural gas demand should raise the ceiling for natural gas wellhead prices.

- Coal prices to electric utilities are expected to decrease, albeit slightly, in 1995 (Figure 18), even after accounting for the additional costs associated with compliance of the Clean Air Act (CAA). Continued strides in mining productivity should offset the CAA costs. In 1996, the price is projected to remain flat in annual terms as rising transportation costs will be offset by mining productivity gains.

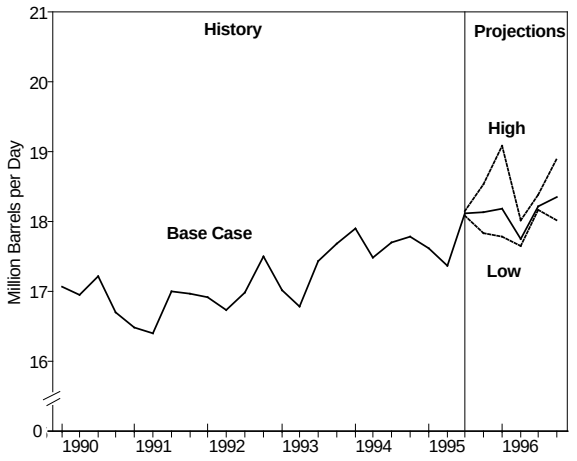
U.S. Oil Demand and Supply Sensitivities

Figure 19. Total Petroleum Demand: Macro Cases



Sources: Third Quarter 1995 STIFS database. Details provided in Figure References Section, p. 42.

Figure 20. Total Petroleum Demand: Weather Cases



Sources: Third Quarter 1995 STIFS database. Details provided in Figure References Section, p. 42.

- The petroleum demand and supply outlook for the mid-price case is based on assumed normal temperatures and GDP growth of 2.6 and 1.8 percent per year in 1995 and 1996. To enhance the usefulness of the mid-case forecast, ranges of possible outcomes for petroleum demand and supply, using alternative macroeconomic, price, and weather assumptions, are also derived (Tables 5 and 7). Plausible macroeconomic and weather-related petroleum demand cases are illustrated in Figures 19 and 20.

- The petroleum price sensitivity assumes that nonpetroleum prices remain constant. The weather sensitivities assume deviations above and below normal that correspond to one-half of the largest quarterly deviations from normal in heating and cooling degree-days over the last 15 years.

- A 1-percent increase in real GDP raises petroleum demand by about 110,000 barrels per day. The impact of shifts in economic growth varies depending upon distribution of incremental growth across energy-intensive and non-energy-intensive sectors (Table 8).

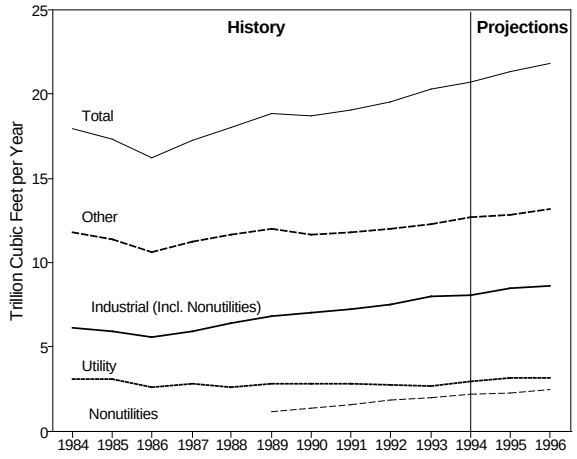
- A $1-per-barrel increase in crude oil prices, assuming no price response from non-petroleum energy sources, reduces demand by about 39,000 barrels per day (Tables 9 and 10).

- A $1-per-barrel increase in crude oil prices boosts domestic oil supply (crude oil and natural gas liquids production) by about 65,000 barrels per day.

- A 1-percent increase in heating degree-days increases demand by about 27,000 barrels per day. The impact of heating degree-day deviations from normal is not likely to be symmetrical. Extremely cold weather could result in indirect effects on fuel oil markets due to potential natural gas supply constraints that have no counterparts in the case of mild weather (Figure 20).

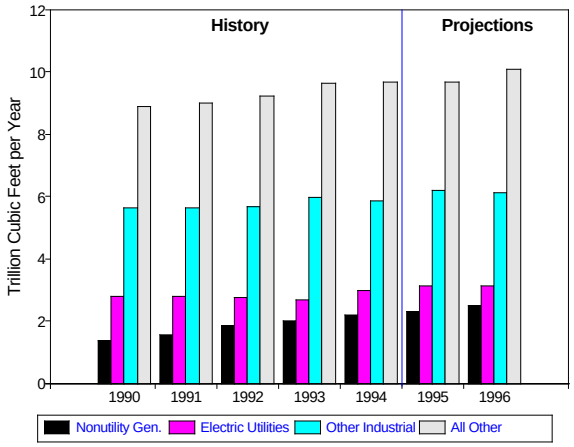
- A 1-percent increase in cooling degree-days increases petroleum demand by about 6,000 barrels per day. (See Appendix A for sensitivity calculation methodology.)

Figure 21. U.S. Natural Gas Demand Trends



Mid World Oil Price Case
Sources: Third Quarter 1995 STIFS database. Details provided in Figure References Section, p. 42.

Figure 22. Natural Gas Demand for Power Generation and Other Uses



Mid World Oil Price Case
Note: "All Other" denotes residential and commercial demand.
Sources: Third Quarter 1995 STIFS database. Details provided in Figure References Section, p. 42.

- Demand for natural gas in first quarter 1995 fell relative to its 1994 level due to the mild winter. But, total annual gas demand in 1995 is projected to grow by 2.7 percent if gas prices remain low as expected and if normal weather conditions prevail in the fall. In 1996, a record high of 21.8 trillion cubic feet in total gas demand is projected, as demand grows by 2.6 percent. This expected growth, which would bring U.S. gas demand to its highest level since 1973[14], is dependent on the assumption of normal weather, as economic growth is expected to slow (Figure 21 and Table 10).

- Residential gas demand growth was negative in fourth quarter 1994 due to the weak heating market. This condition carried over into the first quarter 1995, and the key reason is the expected negative residential sector growth in 1995. In 1996, due mainly to assumptions of normal weather, residential demand is expected to be up by 5.2 percent. This growth also reflects the continued addition of new natural gas customers.

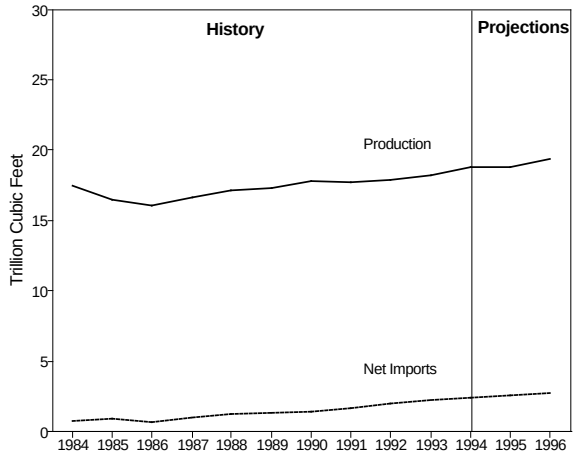
- Preliminary data for industrial gas demand in 1994 indicated a surprising weakness in the sector that is expected to be reversed in 1995. Given the relatively low natural gas prices and continued but decelerating growth in manufacturing production, 1995 is likely to show a considerable increase in industrial gas use. In 1996, industrial gas demand growth slows along with the economy (Figure 22).

- Growth in gas-powered electricity generation by utilities is expected to rise by 2.4 percent in 1995 as lower-priced gas edges out oil generation (Table 12). It is expected to remain at about 1995 levels in 1996. Nonutility gas generation is expected to continue to rise through the forecast period as additional gas-powered capacity is added.

- Commercial sector demand continues to rise along with the economy in 1995 and 1996 as employment increases.

U.S. Natural Gas Supply

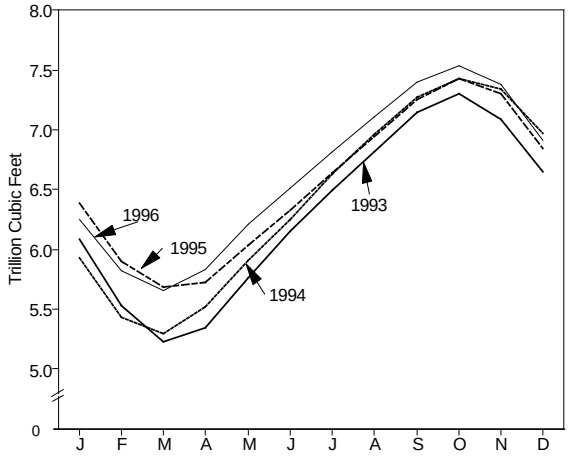
Figure 23. U.S. Dry Gas Production and Net Imports



Mid World Oil Price Case

Sources: Third Quarter 1995 STIFS database and Energy Information Administration, Reserves and Natural Gas Division. Details provided in Figure References Section, p. 42.

Figure 24. Total Gas in Underground Storage



Mid World Oil Price Case

Sources: Third Quarter 1995 STIFS database. Details provided in Figure References Section, p. 42.

- U.S. dry gas production is expected to remain flat in as imports of lower-priced Canadian gas continue and as excess gas in storage is worked off. Dry gas production in 1995 is projected at about 18.85 trillion cubic feet, about the same as in 1994. In 1996, dry gas production is expected to increase to 19.3 trillion cubic feet as gas demand rises by 2.6 percent amidst more balanced inventory conditions (Figure 23 and Table 10).

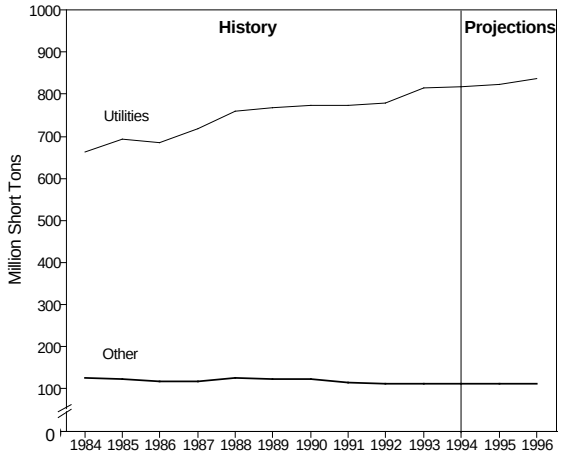
- Low heating demand due to the mild temperatures of this past winter resulted in relatively high storage levels, which at the end of the season, March 31, were estimated to be 385 billion cubic feet higher than in 1994 (Figure 24). However, a slower rate of net storage injection this year had reduced the storage surplus to 85 billion cubic feet on July 1 compared with July 1, 1994,[15] and gas storage levels should be close to 1994 levels during the second half of 1995. However, storage levels in 1994 were higher than they were in the previous years, an effect of restructuring.

- The natural gas rig count averaged 352 for the month of June,[16] and was considerably lower than in June 1994. Increasing technological capability in the exploration and recovery of natural gas continues to increase the volume of reserves added per active rig, influencing the lowering of the number of active rigs.

- Rising Canadian natural gas production and exports of competitively priced gas from Canada have tended to keep a lid on gas price increases. Net natural gas imports are forecast to continue to expand through the forecast, by 6.3 percent in 1995, and 7.5 percent in 1996. In 1996, net natural gas imports are expected to amount to 12.6 percent of total U.S. demand.

- U.S. dry gas productive capacity is expected to increase through the forecast period, rather than decline as previously expected, given the projected base case wellhead prices. This is due to increasing efficiency in gas exploration and development.[17]

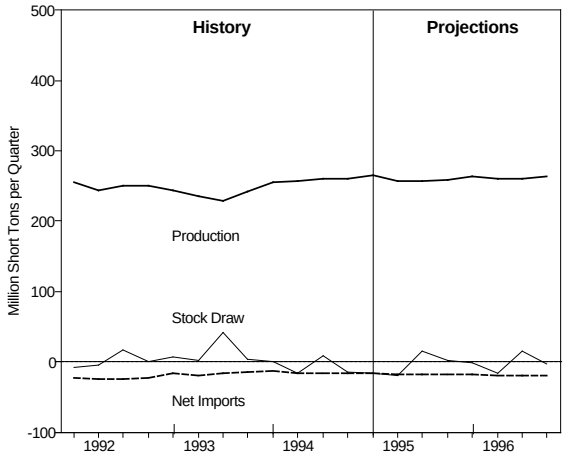
Figure 25. U.S. Coal Demand Trends



Mid World Oil Price Case

Sources: Third Quarter 1995 STIFS database. Details provided in Figure References Section, p. 42.

Figure 26. Components of U.S. Coal Supply



Mid World Oil Price Case

Sources: Third Quarter 1995 STIFS database and Energy Information Administration, Office of Coal, Nuclear, Electric, and Alternative Fuels. Details provided in Figure References Section, p. 42.

- Total coal demand is expected to increase by 0.8 percent in 1995 (Table 11). Rising demand for coal in the electricity sector will help stimulate an additional 1.6 percent increase in coal demand in 1996 (Figure 25).

- Coal consumed by utility and nonutility generators to produce electricity is expected to increase somewhat in 1995 (Table 11), but growing demand for electricity will primarily be met by increases in nuclear and hydroelectric generation this year. In 1996, however, continued growth in the demand for electricity is expected to be met largely by coal since hydroelectric growth is expected to be down from 1995 levels. Coal-fired electricity generation accounts for approximately 56 percent of electricity produced by utilities in 1995 and 1996, and 16 percent of electricity generated by nonutility power producers.

- Demand for coal at coke plants is expected to remain flat, at approximately 32 million short tons annually, throughout the forecast, as a result of coking plant capacity constraints. The limitations on coke production has led to increased reliance on imports of coke and the supplemental use of non-coke methods of steel production (steel recycling and electric-arc furnaces) by the iron and steel industry. A 2.1 percent increase in steel output last year was accompanied by a 1.3 percent increase in coking coal demand (Table 2).

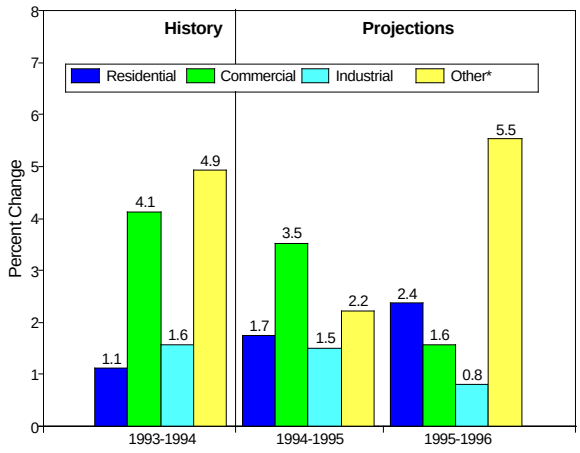
- Coal demand by the retail and general industry sectors is also expected to remain flat in 1995 and 1996 at about 81 million short tons annually. Demand growth from these sectors will be hindered by coal being displaced to meet environmental regulations.

- U.S. coal exports are expected to grow in 1995, increasing by 9.9 percent. Exports should continue growing in 1996, as worldwide demand improves (Table 11).

- Coal production is expected to increase by 0.6 percent in 1995, and increase by 0.9 percent in 1996, with an annual output level of 1,046 million short tons in 1996 (Figure 26).

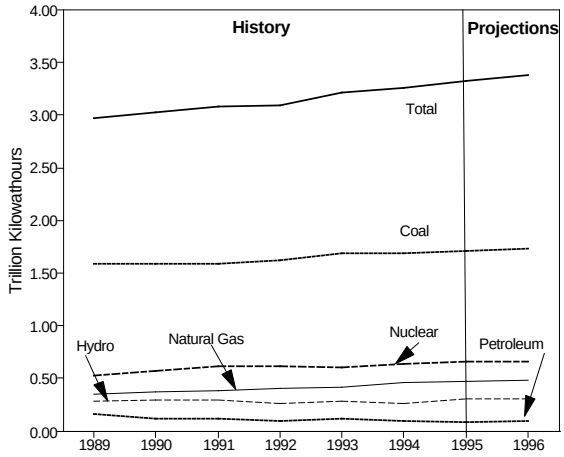
U.S. Electricity Demand and Supply

Figure 27. U.S. Electricity Demand



*Includes nonutility own use
Mid World Oil Price Case
Sources: Third Quarter 1995 STIFS database. Details provided in Figure References Section, p. 42.

Figure 28. U.S. Electricity Production*



*Includes nonutilities
Mid World Oil Price Case
Sources: Third Quarter 1995 STIFS database and Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels. Details provided in Figure References Section, p. 42.

- Total electricity demand is expected to continue to rise steadily through the forecast period, at a rate of 2.1 percent in 1995, and 1.7 percent in 1996.

- Growth in residential demand for electricity in 1995 is projected at 1.7 percent, somewhat higher than in 1994, due mainly to the effects of a hotter summer and assumed colder fourth quarter. In 1996, residential electricity demand growth is expected to expand at an even faster rate of 2.4 percent, despite slower economic growth, due to the assumption of a much colder first quarter than in 1995.

- Commercial sector demand is projected to rise by 3.5 percent in 1995 and 1.6 percent in 1996, due primarily to expanding employment (Figure 27 and Table 12).

- Industrial demand is projected to grow by 1.5 percent in 1995, but slow to 0.8 percent in 1996, reflecting the slower rate of economic growth (Table 12).

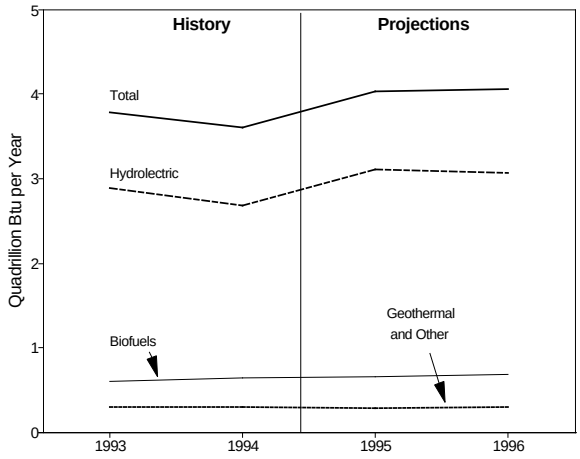
- U.S. utilities are expected to generate about 2.0 and 1.0 percent more electricity in 1995 and 1996, respectively. Nonutility generation is expected to increase at even faster rates of 4.0 percent in 1995, and 5.0 percent in 1996, as a result of capacity additions (Table 12).[18]

- Hydropower generation by electric utilities is expected to recover in 1995 from relatively low 1994 levels, edging out fossil fuel generation (Figure 28). Normal precipitation in the Northwest has improved water conditions after the drought of the past few years. Nuclear power generation is expected to rise in 1995 and 1996, as Watts Bar 1 goes on-line and Browns Ferry 3 returns to service.[19]

- Net imports of electricity from Canada in 1995 are expected to be down from the extraordinary 1994 levels. Slight decreases in purchases from Ontario Hydro and Hydro Quebec due to expected increased internal demand in Canada are a factor, as well as increased U.S. exports to Canada during the U.S. off-peak time.

U.S. Renewable Energy Demand

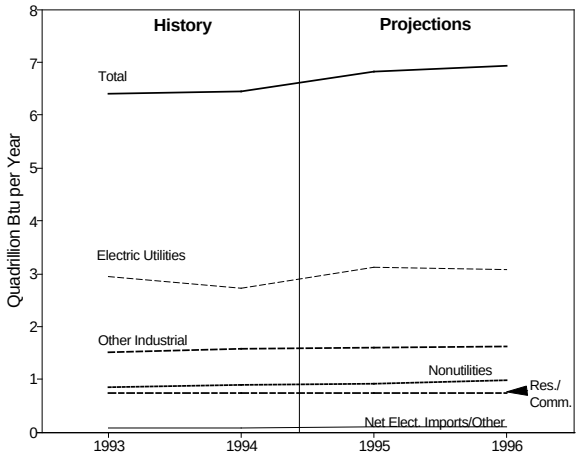
Figure 29. Renewable Energy Use for Electricity



Mid World Oil Price Case

Sources: Third Quarter 1995 STIFS database. Details provided in Figure References Section, p. 42.

Figure 30. Renewable Energy Use by Sector



Mid World Oil Price Case

Sources: Third Quarter 1995 STIFS database and Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels. Details provided in Figure References Section, p. 42.

- Renewable energy use in the United States amounted to about 6.5 quadrillion Btu (quads), or about 7.3 percent of total domestic gross energy demand in 1994 (Table 13). In 1994, renewables demand growth slowed to just under 1 percent, due to an overall reduction in hydroelectric power availability. In 1995, renewables growth should resume as hydroelectric sources recover and use of biomass nonutility power generation expands.

- More than half of all renewable energy use measured by EIA is associated with the production of electricity. While the biggest component of electricity producers' use of renewables is hydroelectric power generated by electric utilities (Figure 29), a significant and growing share of renewables use occurs at nonutility generating facilities.

- Most of the nonutility use of renewables involves biofuels, principally wood and wood by-products. However, all of the major forms of renewables used at nonutilities (including hydropower) are projected to grow.

- On balance, it is expected that of a 0.54 quad increase in total use of renewables in the power generation sector over the 3-year period from 1993 through 1996, about 25 percent will have come from expansion of nonutility power.

- Currently, aside from power generation, the most significant area of renewables use is in the industrial sector, accounting for 24 percent of the total in 1994 (Figure 30). This component is principally biofuels.

- Renewables use in the combined residential and commercial sector, at about 0.75 quad in 1994, accounts for about 12 percent of total domestic renewables demand. Most of this energy is wood used for home heating, with only a very small amount having to do with solar hot water heating.

Table 1. U.S. Macroeconomic and Weather Assumptions

	Macro Case	1994 1st	1994 2nd	1994 3rd	1994 4th	1995 1st	1995 2nd	1995 3rd	1995 4th	1996 1st	1996 2nd	1996 3rd	1996 4th	Year 1994	Year 1995	Year 1996
Macroeconomic [a]																
Real Gross Domestic Product	High							*5493*	*5510*	*5571*	*5639*	*5710*	*5759*		*5487*	*5669*
(billion 1987 dollars - SAAR)	Mid	**5261**	**5314**	**5367**	**5434**	**5470**	*5476*	*5491*	*5497*	*5526*	*5561*	*5600*	*5640*	**5344**	*5483*	*5582*
	Low							*5488*	*5484*	*5482*	*5483*	*5489*	*5522*		*5480*	*5494*
	High							*2.4*	*1.4*	*1.8*	*3.0*	*3.9*	*4.5*		*2.7*	*3.3*
Percentage Change from Prior Year	Mid	**3.7**	**4.1**	**4.4**	**4.1**	**4.0**	*3.1*	*2.3*	*1.2*	*1.0*	*1.5*	*2.0*	*2.6*	**4.1**	*2.6*	*1.8*
	Low							*2.3*	*0.9*	*0.2*	*0.1*	*0.0*	*0.7*		*2.5*	*0.3*
Annualized Percent Change	High							*1.3*	*1.2*	*4.4*	*4.9*	*5.0*	*3.4*			
from Prior Quarter	Mid	**3.3**	**4.0**	**4.0**	**5.0**	**2.7**	*0.5*	*1.1*	*0.4*	*2.2*	*2.5*	*2.8*	*2.9*			
	Low							*0.9*	*-0.3*	*-0.1*	*0.1*	*0.5*	*2.4*			
GDP Implicit Price Deflator	High							*1.290*	*1.297*	*1.304*	*1.308*	*1.313*	*1.319*		*1.287*	*1.311*
(Index, 1987=1.000)	Mid	**1.250**	**1.259**	**1.265**	**1.269**	**1.276**	*1.284*	*1.290*	*1.298*	*1.307*	*1.314*	*1.321*	*1.328*	**1.261**	*1.287*	*1.318*
	Low							*1.290*	*1.299*	*1.310*	*1.320*	*1.330*	*1.337*		*1.287*	*1.324*
	High							*2.0*	*2.2*	*2.1*	*1.9*	*1.8*	*1.7*		*2.1*	*1.9*
Percentage Change from Prior Year	Mid	**1.7**	**2.0**	**2.3**	**2.3**	**2.1**	*2.0*	*2.0*	*2.3*	*2.4*	*2.3*	*2.4*	*2.4*	**2.1**	*2.1*	*2.4*
	Low							*2.0*	*2.3*	*2.6*	*2.8*	*3.0*	*3.0*		*2.1*	*2.9*
Real Disposable Personal Income	High							*3962*	*3975*	*4031*	*4066*	*4108*	*4138*		*3957*	*4086*
(billion 1987 Dollars - SAAR)	Mid	**3779**	**3812**	**3841**	**3911**	**3954**	*3938*	*3960*	*3965*	*3997*	*4007*	*4025*	*4048*	**3836**	*3954*	*4019*
	Low							*3957*	*3956*	*3963*	*3948*	*3942*	*3959*		*3951*	*3953*
	High							*3.1*	*1.6*	*1.9*	*3.2*	*3.7*	*4.1*		*3.2*	*3.2*
Percentage Change from Prior Year	Mid	**3.3**	**3.0**	**3.6**	**4.4**	**4.6**	*3.3*	*3.1*	*1.4*	*1.1*	*1.7*	*1.7*	*2.1*	**3.6**	*3.1*	*1.6*
	Low							*3.0*	*1.1*	*0.2*	*0.2*	*-0.4*	*0.1*		*3.0*	*0.0*
Manufacturing Production	High							*1.226*	*1.228*	*1.252*	*1.282*	*1.317*	*1.335*		*1.231*	*1.296*
(Index, 1987=1.000)	Mid	**1.168**	**1.189**	**1.205**	**1.228**	**1.242**	*1.229*	*1.224*	*1.221*	*1.229*	*1.243*	*1.261*	*1.275*	**1.198**	*1.229*	*1.252*
	Low							*1.223*	*1.215*	*1.207*	*1.204*	*1.205*	*1.215*		*1.227*	*1.208*
	High							*1.7*	*0.0*	*0.8*	*4.4*	*7.4*	*8.7*		*2.8*	*5.3*
Percentage Change from Prior Year	Mid	**4.4**	**5.9**	**6.6**	**6.9**	**6.3**	*3.3*	*1.5*	*-0.5*	*-1.0*	*1.2*	*3.0*	*4.4*	**6.0**	*2.6*	*1.9*
	Low							*1.4*	*-1.0*	*-2.8*	*-2.0*	*-1.5*	*0.0*		*2.5*	*-1.6*
OECD Economic Growth (percent) [b]														**2.8**	*2.7*	*2.6*
Weather [c]																
Heating Degree-Days																
U.S.		**2438**	**488**	**97**	**1439**	**2109**	*570*	*89*	*1636*	*2354*	*524*	*89*	*1636*	**4462**	*4403*	*4603*
New England		**3631**	**860**	**183**	**1998**	**2997**	*970*	*171*	*2269*	*3306*	*915*	*171*	*2269*	**6672**	*6407*	*6660*
Middle Atlantic		**3357**	**674**	**121**	**1782**	**2721**	*751*	*105*	*2026*	*3028*	*716*	*105*	*2026*	**5934**	*5604*	*5875*
U.S. Gas-Weighted		**2496**	**520**	**116**	**1527**	**2164**	*612*	*81*	*1686*	*2480*	*539*	*81*	*1686*	**4659**	*4543*	*4786*
Cooling Degree-Days (U.S.)		**34**	**375**	**732**	**69**	**21**	*315*	*758*	*72*	*30*	*334*	*758*	*72*	**1210**	*1165*	*1193*

[a]Macroeconomic projections from DRI/McGraw-Hill model forecasts are seasonally adjusted at annual rates and modified as appropriate to the mid world oil price case. These mid-case macroeconomic projections are then modified by the low and high world oil price cases (as shown in Table 5) and by various explicit economic assumptions, with the low world oil price case applied to the high macroeconomic case, and the high world oil price case applied to the low macroeconomic case.

[b]OECD: Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. Mexico is also a member, but is not yet included in OECD data.

[c]Population-weighted degree days. A degree day indicates the temperature variation from 65 degrees Fahrenheit (calculated as the simple average of the daily minimum and maximum temperatures) weighted by 1990 population. Normal is used for the forecast period and is defined as the average number of degree days between 1961 and 1990 for a given period.

SAAR: Seasonally-adjusted annualized rate.

Note: Historical data are printed in bold, forecasts are in italic.

Sources: Historical data: Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(95/06); U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, May 1995; U.S. Department of Commerce, National Oceanic and Atmospheric Administration, *Monthly State, Regional, and National Heating/Cooling Degree Days Weighted by Population*; Federal Reserve System, *Statistical Release G.17(419)*, May 1995. Macroeconomic projections are based on DRI/McGraw-Hill Forecast CONTROL0695.

Table 2. U.S. Energy Indicators: Mid World Oil Price Case

	1994				1995				1996				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1994	1995	1996
Macroeconomic [a]															
Real Fixed Investment (billion 1987 dollars - SAAR)	**873**	**892**	**910**	**940**	**972**	*972*	*980*	*988*	*991*	*993*	*999*	*1006*	**904**	*978*	*997*
Real Exchange Rate (index)	**1.078**	**1.057**	**1.016**	**1.009**	**0.997**	*0.941*	*0.936*	*0.930*	*0.924*	*0.922*	*0.932*	*0.941*	**1.040**	*0.951*	*0.930*
Business Inventory Change (billion 1987 dollars - SAAR)	**9.9**	**0.7**	**4.5**	**4.1**	**14.1**	*9.3*	*1.7*	*-5.8*	*-10.2*	*-10.6*	*-7.8*	*-3.6*	**4.8**	*4.8*	*-8.0*
Producer Price Index (index, 1980-1984=1.000)	**1.196**	**1.199**	**1.209**	**1.215**	**1.235**	*1.248*	*1.256*	*1.266*	*1.275*	*1.278*	*1.285*	*1.295*	**1.205**	*1.251*	*1.283*
Consumer Price Index (index, 1980-1984=1.000)	**1.468**	**1.477**	**1.490**	**1.498**	**1.510**	*1.523*	*1.534*	*1.547*	*1.560*	*1.573*	*1.585*	*1.597*	**1.483**	*1.529*	*1.579*
Petroleum Product Price Index (index, 1980-1984=1.000)	**0.550**	**0.581**	**0.637**	**0.597**	**0.579**	*0.651*	*0.564*	*0.610*	*0.665*	*0.657*	*0.643*	*0.644*	**0.591**	*0.601*	*0.652*
Non-Farm Employment (millions)	**112.7**	**113.7**	**114.5**	**115.3**	**116.1**	*116.3*	*116.5*	*116.9*	*117.3*	*117.6*	*118.0*	*118.4*	**114.1**	*116.5*	*117.8*
Commercial Employment (millions)	**74.9**	**75.7**	**76.4**	**77.1**	**77.7**	*78.0*	*78.4*	*78.9*	*79.3*	*79.6*	*79.9*	*80.2*	**76.0**	*78.3*	*79.8*
Total Industrial Production (index, 1987=1.000)	**1.156**	**1.174**	**1.188**	**1.205**	**1.219**	*1.206*	*1.203*	*1.201*	*1.209*	*1.221*	*1.237*	*1.249*	**1.181**	*1.207*	*1.229*
Housing Stock (millions)	**107.3**	**107.7**	**108.6**	**109.0**	**109.2**	*109.6*	*109.9*	*110.2*	*110.5*	*110.8*	*111.1*	*111.4*	**108.2**	*109.7*	*111.0*
Miscellaneous															
Gas Weighted Industrial Production (index, 1987=1.000)	**1.136**	**1.157**	**1.161**	**1.183**	**1.202**	*1.193*	*1.180*	*1.175*	*1.180*	*1.192*	*1.205*	*1.214*	**1.159**	*1.187*	*1.198*
Vehicle Miles Traveled (million miles/day)	**5849**	**6710**	**6802**	**6354**	**6071**	*6902*	*7044*	*6476*	*6226*	*7067*	*7195*	*6630*	**6431**	*6625*	*6780*
Vehicle Fuel Efficiency (miles per gallon)	**19.30**	**20.72**	**20.69**	**19.78**	**19.32**	*20.64*	*21.00*	*20.09*	*19.48*	*21.01*	*21.07*	*20.15*	**20.15**	*20.28*	*20.44*
Real Vehicle Fuel Cost (cents per mile)	**3.93**	**3.75**	**3.98**	**4.09**	**4.06**	*3.93*	*3.76*	*3.91*	*3.99*	*3.81*	*3.82*	*3.91*	**3.94**	*3.92*	*3.88*
Air Travel Capacity (mill. available ton-miles/day)	**340.7**	**362.4**	**382.9**	**374.6**	**367.8**	*380.3*	*401.6*	*385.5*	*384.2*	*395.5*	*414.6*	*397.8*	**365.3**	*383.9*	*398.0*
Aircraft Utilization (mill. revenue ton-miles/day)	**186.3**	**205.8**	**222.9**	**209.1**	**200.3**	*218.1*	*235.4*	*211.7*	*202.3*	*220.8*	*238.2*	*214.7*	**206.1**	*216.5*	*219.0*
Aircraft Yield (cents per ton-mile)	**13.90**	**13.33**	**12.44**	**12.67**	**13.33**	*12.61*	*11.75*	*12.65*	*13.50*	*12.68*	*11.84*	*12.72*	**13.08**	*12.59*	*12.69*
Raw Steel Production (millions)	**24.19**	**24.56**	**24.04**	**25.41**	**26.26**	*25.64*	*25.01*	*26.32*	*25.45*	*24.29*	*23.54*	*24.70*	**97.93**	*103.23*	*97.97*

[a]Macroeconomic projections from DRI/McGraw-Hill model forecasts are seasonally adjusted at annual rates and modified as appropriate to the mid world oil price case. These mid-case macroeconomic projections are then modified by the low and high world price cases (as shown in Table 4) and by various explicit economic assumptions, with low world oil price case applied to the high macroeconomic case, and high world oil price case applied to the low macroeconomic case.

SAAR: Seasonally-adjusted annualized rate.

Note: Historical data are printed in bold, forecasts are in italic.

Sources: Historical data: Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(95/06); U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, May 1995; U.S. Department of Commerce, National Oceanic and Atmospheric Administration, *Monthly State, Regional, and National Heating/Cooling Degree Days Weighted by Population*; Federal Reserve System, *Statistical Release G.17(419)*, May 1995. Macroeconomic projections are based on DRI/McGraw-Hill Forecast CONTROL0695.

Table 3. International Petroleum Supply and Demand: Mid World Oil Price Case

(Million Barrels per Day, Except Closing Stocks)

	1994				1995				1996				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1994	1995	1996
Demand [a]															
OECD															
U.S. (50 States)	**17.9**	**17.5**	**17.7**	**17.8**	**17.6**	*17.4*	*18.1*	*18.1*	*18.2*	*17.8*	*18.2*	*18.4*	**17.7**	*17.8*	*18.1*
U.S. Territories	**0.2**	**0.3**	**0.2**	**0.3**	**0.2**	*0.3*	*0.2*	*0.3*	*0.2*	*0.3*	*0.2*	*0.3*	**0.3**	*0.3*	*0.3*
Canada	**1.7**	**1.7**	**1.8**	**1.8**	**1.8**	*1.7*	*1.8*	*1.8*	*1.8*	*1.7*	*1.8*	*1.8*	**1.7**	*1.8*	*1.8*
Europe [b]	**13.6**	**13.2**	**13.5**	**14.0**	**14.0**	*13.4*	*13.6*	*14.1*	*14.2*	*13.6*	*13.8*	*14.3*	**13.6**	*13.8*	*14.0*
Japan	**6.2**	**5.1**	**5.5**	**5.9**	**6.4**	*5.1*	*5.6*	*6.1*	*6.4*	*5.2*	*5.7*	*6.2*	**5.7**	*5.8*	*5.9*
Australia and New Zealand	**0.9**	**0.9**	**0.9**	**1.0**	**0.9**	*0.9*	*1.0*	*1.0*	*0.9*	*0.9*	*1.0*	*1.0*	**0.9**	*0.9*	*1.0*
Total OECD	**40.6**	**38.7**	**39.6**	**40.6**	**40.9**	*38.8*	*40.3*	*41.4*	*41.7*	*39.5*	*40.7*	*41.9*	**39.9**	*40.4*	*40.9*
Non-OECD															
Former Soviet Union	**5.3**	**4.5**	**4.7**	**5.1**	**4.8**	*4.4*	*4.2*	*4.6*	*4.3*	*4.1*	*3.9*	*4.3*	**4.9**	*4.5*	*4.2*
Europe	**1.3**	**1.2**	**1.2**	**1.2**	**1.3**	*1.3*	*1.2*	*1.3*	*1.4*	*1.3*	*1.2*	*1.3*	**1.2**	*1.3*	*1.3*
China	**3.1**	**3.2**	**3.4**	**3.5**	**3.3**	*3.4*	*3.6*	*3.7*	*3.5*	*3.6*	*3.7*	*3.9*	**3.3**	*3.5*	*3.7*
Other Asia	**6.8**	**6.6**	**6.5**	**7.3**	**7.2**	*6.9*	*6.8*	*7.6*	*7.6*	*7.3*	*7.2*	*8.1*	**6.8**	*7.1*	*7.5*
Other Non-OECD	**11.3**	**11.4**	**11.4**	**11.7**	**11.6**	*11.7*	*11.8*	*12.0*	*11.9*	*12.0*	*12.1*	*12.3*	**11.4**	*11.8*	*12.1*
Total Non-OECD	**27.8**	**26.9**	**27.1**	**28.7**	**28.2**	*27.7*	*27.6*	*29.2*	*28.7*	*28.3*	*28.1*	*29.9*	**27.6**	*28.2*	*28.7*
Total World Demand	**68.4**	**65.6**	**66.7**	**69.4**	**69.1**	*66.6*	*67.9*	*70.6*	*70.4*	*67.7*	*68.9*	*71.7*	**67.5**	*68.5*	*69.7*
Supply [c]															
OECD															
U.S. (50 States)	**9.4**	**9.3**	**9.3**	**9.6**	**9.4**	*9.4*	*9.3*	*9.3*	*9.2*	*9.1*	*9.1*	*9.1*	**9.4**	*9.4*	*9.1*
Canada	**2.3**	**2.3**	**2.4**	**2.4**	**2.4**	*2.4*	*2.4*	*2.4*	*2.4*	*2.4*	*2.4*	*2.4*	**2.3**	*2.4*	*2.4*
North Sea [d]	**5.2**	**5.3**	**5.2**	**5.8**	**5.8**	*5.6*	*5.7*	*5.9*	*6.2*	*6.0*	*6.1*	*6.3*	**5.4**	*5.7*	*6.1*
Other OECD	**1.4**	**1.4**	**1.5**	**1.5**	**1.5**	*1.5*	*1.5*	*1.5*	*1.5*	*1.5*	*1.5*	*1.5*	**1.5**	*1.5*	*1.5*
Total OECD	**18.3**	**18.3**	**18.4**	**19.3**	**19.2**	*18.8*	*18.9*	*19.1*	*19.4*	*19.0*	*19.1*	*19.3*	**18.6**	*19.0*	*19.2*
Non-OECD															
OPEC	**27.5**	**27.5**	**27.4**	**27.7**	**27.6**	*27.6*	*27.7*	*27.9*	*27.9*	*28.1*	*28.3*	*28.7*	**27.5**	*27.7*	*28.2*
Former Soviet Union	**7.2**	**7.0**	**6.9**	**7.0**	**6.9**	*6.5*	*6.4*	*6.5*	*6.5*	*6.1*	*6.1*	*6.2*	**7.0**	*6.6*	*6.2*
China	**2.9**	**2.9**	**2.9**	**3.0**	**3.0**	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*	**2.9**	*3.0*	*3.0*
Mexico	**3.2**	**3.2**	**3.2**	**3.2**	**3.1**	*3.2*	*3.2*	*3.2*	*3.2*	*3.2*	*3.2*	*3.2*	**3.2**	*3.2*	*3.2*
Other Non-OECD	**8.6**	**8.7**	**8.9**	**9.1**	**9.3**	*8.8*	*9.0*	*9.1*	*9.1*	*9.2*	*9.4*	*9.6*	**8.8**	*9.1*	*9.3*
Total Non-OECD	**49.4**	**49.3**	**49.4**	**49.9**	**49.9**	*49.0*	*49.3*	*49.7*	*49.7*	*49.6*	*50.0*	*50.6*	**49.5**	*49.5*	*50.0*
Total World Supply	**67.7**	**67.6**	**67.8**	**69.2**	**69.1**	*67.9*	*68.2*	*68.8*	*69.1*	*68.6*	*69.1*	*69.9*	**68.1**	*68.5*	*69.2*
Stock Changes and Statistical Discrepancy															
Net Stock Withdrawals or Additions (-)															
U.S. (50 States including SPR)	**0.7**	**-0.4**	**-0.6**	**0.3**	**0.6**	*-0.2*	*-0.7*	*0.2*	*0.7*	*-0.6*	*-0.3*	*0.2*	**0.0**	*0.0*	*0.0*
Other	**0.8**	**-1.3**	**-0.4**	**0.3**	**-0.4**	*-1.4*	*0.2*	*1.2*	*0.1*	*-0.8*	*-0.3*	*1.1*	**-0.2**	*-0.1*	*0.0*
Total Stock Withdrawals	**1.5**	**-1.8**	**-1.0**	**0.6**	**0.2**	*-1.5*	*-0.5*	*1.4*	*0.8*	*-1.3*	*-0.7*	*1.3*	**-0.2**	*-0.1*	*0.0*
Statistical Discrepancy	**-0.8**	**-0.3**	**-0.1**	**-0.4**	**-0.2**	*0.2*	*0.3*	*0.4*	*0.5*	*0.5*	*0.5*	*0.5*	**-0.4**	*0.2*	*0.5*
Closing Stocks (billion barrels) [e]	**5.5**	**5.7**	**5.8**	**5.7**	**5.7**	*5.8*	*5.9*	*5.8*	*5.7*	*5.8*	*5.9*	*5.7*	**5.7**	*5.8*	*5.7*
Non-OPEC Supply	**40.2**	**40.1**	**40.4**	**41.5**	**41.5**	*40.3*	*40.5*	*41.0*	*41.3*	*40.5*	*40.8*	*41.3*	**40.6**	*40.8*	*41.0*
Net Exports from Former Soviet Union	**1.9**	**2.5**	**2.2**	**1.9**	**2.1**	*2.1*	*2.2*	*1.9*	*2.2*	*2.0*	*2.2*	*1.9*	**2.1**	*2.1*	*2.1*

[a]Demand for petroleum by the OECD countries is synonymous with "petroleum product supplied" which is defined in the glossary of the EIA *Petroleum Supply Monthly,* DOE/EIA-0109. Demand for petroleum by the non-OECD countries is "apparent consumption" which includes internal consumption, refinery fuel and loss, and bunkering.

[b]OECD Europe includes the former East Germany.

[c]Includes production of crude oil (including lease condensates), natural gas plant liquids, other hydrogen and hydrocarbons for refinery feedstocks, refinery gains, alcohol, and liquids produced from coal and other sources.

[d]Includes offshore supply from Denmark, Germany, the Netherlands, Norway, and the United Kingdom.

[e]Excludes stocks held in the Former CPEs.

OECD: Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. Mexico is also a member, but is not yet included in OECD data.

OPEC: Organization of Petroleum Exporting Countries: Algeria, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

SPR: Strategic Petroleum Reserve

Former Soviet Union: Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

Notes: Minor discrepancies with other published EIA historical data are due to rounding. Historical data are printed in bold, forecasts are in italic. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Energy Information Administration, *International Petroleum Statistics Report,* DOE/EIA-0520(95/07); Organization for Economic Cooperation and Development, Annual and Monthly Oil Statistics Database, June 1995.

Table 4. U.S. Energy Prices
(Nominal Dollars)

	Price Case	1994 1st	1994 2nd	1994 3rd	1994 4th	1995 1st	1995 2nd	1995 3rd	1995 4th	1996 1st	1996 2nd	1996 3rd	1996 4th	Year 1994	Year 1995	Year 1996
Imported Crude Oil [a]	Low							*15.47*	*14.70*	*14.30*	*14.32*	*14.25*	*14.50*		*16.22*	*14.34*
(dollars per barrel)	Mid	**13.00**	**15.80**	**16.71**	**16.15**	**16.99**	*17.94*	*16.33*	*17.50*	*17.50*	*17.75*	*17.75*	*18.00*	**15.52**	*17.17*	*17.75*
	High							*17.19*	*20.30*	*20.70*	*21.18*	*21.25*	*21.50*		*18.11*	*21.17*
Natural Gas Wellhead	Low							*1.59*	*1.65*	*1.62*	*1.43*	*1.46*	*1.63*		*1.60*	*1.54*
(dollars per thousand cubic feet)	Mid	**2.08**	**1.87**	**1.72**	**1.63**	**1.57**	*1.57*	*1.62*	*1.93*	*1.96*	*1.79*	*1.80*	*1.95*	**1.82**	*1.68*	*1.88*
	High							*1.65*	*2.27*	*2.39*	*2.17*	*2.17*	*2.50*		*1.77*	*2.31*
Petroleum Products																
Gasoline Retail [b]	Low							*1.20*	*1.15*	*1.14*	*1.18*	*1.19*	*1.18*		*1.19*	*1.17*
(dollars per gallon)	Mid	**1.11**	**1.15**	**1.23**	**1.21**	**1.18**	*1.24*	*1.21*	*1.21*	*1.21*	*1.26*	*1.27*	*1.26*	**1.17**	*1.21*	*1.25*
	High							*1.23*	*1.27*	*1.28*	*1.34*	*1.35*	*1.34*		*1.23*	*1.33*
No. 2 Diesel Oil, Retail	Low							*1.09*	*1.11*	*1.10*	*1.09*	*1.09*	*1.14*		*1.11*	*1.10*
(dollars per gallon)	Mid	**1.11**	**1.10**	**1.12**	**1.12**	**1.09**	*1.12*	*1.11*	*1.18*	*1.17*	*1.17*	*1.17*	*1.21*	**1.11**	*1.13*	*1.18*
	High							*1.13*	*1.24*	*1.24*	*1.25*	*1.25*	*1.29*		*1.15*	*1.26*
No. 2 Heating Oil, Wholesale	Low							*0.44*	*0.48*	*0.47*	*0.47*	*0.46*	*0.50*		*0.48*	*0.48*
(dollars per gallon)	Mid	**0.52**	**0.49**	**0.51**	**0.50**	**0.49**	*0.49*	*0.46*	*0.54*	*0.54*	*0.55*	*0.54*	*0.57*	**0.51**	*0.50*	*0.55*
	High							*0.49*	*0.61*	*0.61*	*0.63*	*0.62*	*0.65*		*0.53*	*0.63*
No. 2 Heating Oil, Retail	Low							*0.80*	*0.87*	*0.90*	*0.88*	*0.83*	*0.90*		*0.86*	*0.89*
(dollars per gallon)	Mid	**0.91**	**0.87**	**0.83**	**0.86**	**0.88**	*0.86*	*0.82*	*0.93*	*0.97*	*0.95*	*0.91*	*0.97*	**0.88**	*0.88*	*0.96*
	High							*0.84*	*0.99*	*1.04*	*1.03*	*0.99*	*1.05*		*0.90*	*1.04*
No. 6 Residual Fuel Oil, Retail [c]	Low							*16.63*	*16.03*	*15.82*	*13.84*	*13.64*	*14.58*		*16.68*	*14.55*
(dollars per barrel)	Mid	**14.37**	**13.86**	**15.84**	**15.34**	**16.83**	*17.44*	*17.22*	*18.04*	*18.12*	*16.31*	*16.17*	*17.09*	**14.78**	*17.41*	*17.00*
	High							*17.80*	*20.07*	*20.42*	*18.80*	*18.70*	*19.63*		*18.14*	*19.46*
Electric Utility Fuels																
Coal	Low							*1.31*	*1.29*	*1.28*	*1.29*	*1.27*	*1.27*		*1.32*	*1.28*
(dollars per million Btu)	Mid	**1.36**	**1.38**	**1.35**	**1.33**	**1.33**	*1.36*	*1.34*	*1.35*	*1.34*	*1.36*	*1.34*	*1.34*	**1.36**	*1.34*	*1.34*
	High							*1.37*	*1.38*	*1.39*	*1.42*	*1.41*	*1.42*		*1.36*	*1.41*
Heavy Fuel Oil [d]	Low							*2.88*	*2.79*	*2.69*	*2.35*	*2.40*	*2.56*		*2.82*	*2.50*
(dollars per million Btu)	Mid	**2.39**	**2.26**	**2.54**	**2.48**	**2.61**	*2.95*	*2.97*	*3.11*	*3.05*	*2.74*	*2.80*	*2.96*	**2.40**	*2.93*	*2.89*
	High							*3.06*	*3.44*	*3.42*	*3.13*	*3.21*	*3.37*		*3.05*	*3.28*
Natural Gas	Low							*1.94*	*2.05*	*2.08*	*1.84*	*1.86*	*2.06*		*1.97*	*1.94*
(dollars per million Btu)	Mid	**2.65**	**2.31**	**2.10**	**2.03**	**1.98**	*1.92*	*1.97*	*2.29*	*2.40*	*2.17*	*2.18*	*2.35*	**2.23**	*2.03*	*2.26*
	High							*1.99*	*2.57*	*2.81*	*2.52*	*2.51*	*2.83*		*2.11*	*2.64*
Other Residential																
Natural Gas	Low							*8.07*	*6.36*	*6.01*	*6.59*	*7.88*	*6.28*		*6.29*	*6.32*
(dollars per thousand cubic feet)	Mid	**6.08**	**6.89**	**8.03**	**6.27**	**5.80**	*6.63*	*8.09*	*6.46*	*6.12*	*6.80*	*8.33*	*6.66*	**6.41**	*6.32*	*6.55*
	High							*8.12*	*6.62*	*6.52*	*7.23*	*8.63*	*6.85*		*6.37*	*6.89*
Electricity	Low							*8.8*	*8.3*	*8.0*	*8.6*	*8.8*	*8.3*		*8.4*	*8.4*
(cents per kilowatthour)	Mid	**7.9**	**8.6**	**8.8**	**8.3**	**8.0**	*8.7*	*9.1*	*8.6*	*8.3*	*9.0*	*9.3*	*8.8*	**8.4**	*8.6*	*8.8*
	High							*9.4*	*9.0*	*8.8*	*9.5*	*9.8*	*9.3*		*8.8*	*9.3*

[a]Cost of imported crude oil to U.S.
[b]Average for all grades and services.
[c]Average for all sulfur contents.
[d]Includes fuel oils No. 4, No. 5, and No. 6 and topped crude fuel oil prices.

Notes: Data are estimated for the fourth quarter of 1994. Prices exclude taxes, except prices for gasoline, residential natural gas, and diesel. Price cases are derived by simulating all energy product price models under the assumptions of the three world oil price cases using the mid macroeconomic case and normal weather assumptions for all simulations. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(95/06); and *Petroleum Marketing Monthly*, DOE/EIA-0380(95/06).

Table 5. U.S. Petroleum Supply and Demand: Low World Oil Price Case

(Million Barrels per Day, Except Closing Stocks)

	1994				1995				1996				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1994	1995	1996
Supply															
Crude Oil Supply															
Domestic Production [a]	**6.78**	**6.64**	**6.55**	**6.68**	**6.63**	*6.57*	*6.38*	*6.31*	*6.23*	*6.09*	*5.98*	*5.92*	**6.66**	*6.47*	*6.05*
Alaska	**1.61**	**1.53**	**1.50**	**1.59**	**1.56**	*1.50*	*1.41*	*1.43*	*1.41*	*1.33*	*1.29*	*1.30*	**1.56**	*1.48*	*1.33*
Lower 48	**5.16**	**5.10**	**5.05**	**5.10**	**5.07**	*5.07*	*4.96*	*4.88*	*4.82*	*4.76*	*4.69*	*4.62*	**5.10**	*5.00*	*4.72*
Net Imports (including SPR) [b]	**6.12**	**7.06**	**7.66**	**7.00**	**6.74**	*7.18*	*8.17*	*7.51*	*7.25*	*8.04*	*8.52*	*7.97*	**6.96**	*7.41*	*7.95*
Gross Imports (excluding SPR)	**6.17**	**7.15**	**7.74**	**7.12**	**6.83**	*7.30*	*8.25*	*7.61*	*7.36*	*8.15*	*8.61*	*8.08*	**7.05**	*7.50*	*8.05*
SPR Imports	**0.03**	**0.02**	**0.00**	**0.00**	**0.00**	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	**0.01**	*0.00*	*0.00*
Exports	**0.09**	**0.11**	**0.07**	**0.12**	**0.09**	*0.11*	*0.08*	*0.10*	*0.12*	*0.11*	*0.08*	*0.10*	**0.10**	*0.10*	*0.10*
Other SPR Supply	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	*0.00*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	**0.00**	*0.01*	*0.01*
SPR Stock Withdrawn or Added (-)	**-0.04**	**-0.02**	**0.00**	**0.00**	**0.00**	*0.00*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	**-0.01**	*-0.01*	*-0.01*
Other Stock Withdrawn or Added (-)	**-0.08**	**0.16**	**-0.08**	**-0.02**	**-0.01**	*0.19*	*-0.13*	*-0.03*	*0.00*	*-0.02*	*-0.01*	*0.03*	**-0.01**	*0.01*	*0.00*
Product Supplied and Losses	**-0.01**	**-0.01**	**-0.01**	**-0.01**	**-0.01**	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	**-0.01**	*-0.01*	*-0.01*
Unaccounted-for Crude Oil	**0.36**	**0.32**	**0.23**	**0.16**	**0.13**	*0.34*	*0.28*	*0.27*	*0.26*	*0.27*	*0.28*	*0.27*	**0.27**	*0.25*	*0.27*
Total Crude Oil Supply	**13.13**	**14.15**	**14.36**	**13.81**	**13.49**	*14.27*	*14.69*	*14.05*	*13.73*	*14.38*	*14.76*	*14.19*	**13.87**	*14.13*	*14.26*
Other Supply															
NGL Production	**1.64**	**1.71**	**1.77**	**1.79**	**1.77**	*1.72*	*1.71*	*1.74*	*1.74*	*1.71*	*1.71*	*1.75*	**1.73**	*1.74*	*1.73*
Other Hydrocarbon and Alcohol Inputs	**0.24**	**0.23**	**0.26**	**0.29**	**0.30**	*0.30*	*0.31*	*0.37*	*0.34*	*0.30*	*0.33*	*0.38*	**0.26**	*0.32*	*0.34*
Crude Oil Product Supplied	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	**0.01**	*0.01*	*0.01*
Processing Gain	**0.72**	**0.76**	**0.77**	**0.82**	**0.72**	*0.80*	*0.82*	*0.78*	*0.76*	*0.80*	*0.82*	*0.79*	**0.77**	*0.78*	*0.79*
Net Product Imports [c]	**1.33**	**1.22**	**1.10**	**0.72**	**0.71**	*0.64*	*1.19*	*1.03*	*1.05*	*1.21*	*1.07*	*1.16*	**1.09**	*0.89*	*1.12*
Gross Product Imports [c]	**2.16**	**1.99**	**1.92**	**1.66**	**1.61**	*1.64*	*2.13*	*2.00*	*2.00*	*2.11*	*1.95*	*2.14*	**1.93**	*1.85*	*2.05*
Product Exports	**0.83**	**0.77**	**0.82**	**0.95**	**0.90**	*1.00*	*0.93*	*0.98*	*0.94*	*0.90*	*0.88*	*0.98*	**0.84**	*0.95*	*0.92*
Product Stock Withdrawn or Added (-) [d]	**0.81**	**-0.58**	**-0.56**	**0.35**	**0.60**	*-0.36*	*-0.58*	*0.24*	*0.67*	*-0.51*	*-0.31*	*0.23*	**0.00**	*-0.03*	*0.02*
Total Supply	**17.89**	**17.49**	**17.70**	**17.79**	**17.61**	*17.38*	*18.14*	*18.23*	*18.30*	*17.90*	*18.40*	*18.52*	**17.72**	*17.84*	*18.28*
Demand															
Motor Gasoline	**7.21**	**7.71**	**7.83**	**7.65**	**7.48**	*7.96*	*8.00*	*7.72*	*7.66*	*8.07*	*8.19*	*7.89*	**7.60**	*7.79*	*7.95*
Jet Fuel	**1.51**	**1.52**	**1.54**	**1.54**	**1.52**	*1.42*	*1.67*	*1.66*	*1.58*	*1.54*	*1.61*	*1.60*	**1.53**	*1.57*	*1.58*
Distillate Fuel Oil	**3.53**	**3.03**	**2.95**	**3.15**	**3.45**	*3.06*	*3.04*	*3.27*	*3.54*	*3.16*	*3.10*	*3.34*	**3.16**	*3.20*	*3.28*
Residual Fuel Oil	**1.26**	**1.03**	**0.89**	**0.91**	**0.89**	*0.78*	*0.91*	*1.05*	*1.14*	*0.91*	*0.94*	*1.06*	**1.02**	*0.91*	*1.01*
Other Oils [e]	**4.38**	**4.21**	**4.49**	**4.55**	**4.28**	*4.16*	*4.53*	*4.53*	*4.39*	*4.23*	*4.56*	*4.63*	**4.41**	*4.38*	*4.45*
Total Demand	**17.89**	**17.49**	**17.70**	**17.79**	**17.62**	*17.38*	*18.14*	*18.23*	*18.30*	*17.90*	*18.40*	*18.52*	**17.72**	*17.84*	*18.28*
Total Petroleum Net Imports	**7.45**	**8.27**	**8.77**	**7.72**	**7.45**	*7.82*	*9.36*	*8.54*	*8.30*	*9.25*	*9.59*	*9.14*	**8.05**	*8.30*	*9.07*
Closing Stocks (million barrels)															
Crude Oil (excluding SPR) [f]	**342**	**328**	**335**	**337**	**338**	*321*	*332*	*335*	*335*	*337*	*338*	*335*	**337**	*335*	*335*
Total Motor Gasoline	**213**	**212**	**205**	**215**	**211**	*208*	*210*	*221*	*223*	*215*	*208*	*222*	**215**	*221*	*222*
Finished Motor Gasoline	**176**	**177**	**169**	**176**	**168**	*166*	*169*	*182*	*183*	*177*	*169*	*183*	**176**	*182*	*183*
Blending Components	**38**	**35**	**36**	**39**	**43**	*42*	*41*	*39*	*40*	*38*	*39*	*39*	**39**	*39*	*39*
Jet Fuel	**38**	**41**	**45**	**47**	**39**	*40*	*43*	*46*	*46*	*46*	*46*	*48*	**47**	*46*	*48*
Distillate Fuel Oil	**99**	**120**	**145**	**145**	**115**	*117*	*139*	*140*	*96*	*110*	*134*	*138*	**145**	*140*	*138*
Residual Fuel Oil	**42**	**39**	**44**	**42**	**38**	*35*	*40*	*44*	*37*	*40*	*40*	*42*	**42**	*44*	*42*
Other Oils [g]	**260**	**293**	**317**	**275**	**266**	*303*	*324*	*281*	*270*	*308*	*319*	*276*	**275**	*281*	*276*
Total Stocks (excluding SPR)	**994**	**1033**	**1092**	**1061**	**1007**	*1023*	*1087*	*1068*	*1007*	*1056*	*1085*	*1061*	**1061**	*1068*	*1061*
Crude Oil in SPR	**590**	**592**	**592**	**592**	**592**	*592*	*593*	*594*	*595*	*596*	*598*	*599*	**592**	*594*	*599*
Total Stocks (including SPR)	**1584**	**1624**	**1684**	**1653**	**1599**	*1614*	*1680*	*1662*	*1602*	*1652*	*1683*	*1659*	**1653**	*1662*	*1659*

[a] Includes lease condensate.

[b] Net imports equals gross imports plus SPR imports minus exports.

[c] Includes finished petroleum products, unfinished oils, gasoline blending components, and natural gas plant liquids for processing.

[d] Includes an estimate of minor product stock change based on monthly data.

[e] Includes crude oil product supplied, natural gas liquids, liquefied refinery gas, other liquids, and all finished petroleum products except motor gasoline, jet fuel, distillate, and residual fuel oil.

[f] Includes crude oil in transit to refineries.

[g] Includes stocks of all other oils such as aviation gasoline, kerosene, natural gas liquids (including ethane), aviation gasoline blending components, naphtha and other oils for petrochemical feedstock use, special naphthas, lube oils, wax, coke, asphalt, road oil, and miscellaneous oils.

SPR: Strategic Petroleum Reserve

NGL: Natural Gas Liquids

Notes: Minor discrepancies with other EIA published historical data are due to rounding. Historical data are printed in bold, forecasts are in italic. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration, *Petroleum Supply Monthly*, DOE/EIA-0109(93/01-95/06); and *Weekly Petroleum Status Report*, DOE/EIA-0208(various issues).

Table 6. U.S. Petroleum Supply and Demand: Mid World Oil Price Case

(Million Barrels per Day, Except Closing Stocks)

	1994				1995				1996				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1994	1995	1996
Supply															
Crude Oil Supply															
Domestic Production [a]	**6.78**	**6.64**	**6.55**	**6.68**	**6.63**	*6.57*	*6.46*	*6.45*	*6.41*	*6.32*	*6.23*	*6.20*	**6.66**	*6.53*	*6.29*
Alaska	**1.61**	**1.53**	**1.50**	**1.59**	**1.56**	*1.50*	*1.45*	*1.47*	*1.45*	*1.37*	*1.33*	*1.34*	**1.56**	*1.49*	*1.37*
Lower 48	**5.16**	**5.10**	**5.05**	**5.10**	**5.07**	*5.07*	*5.01*	*4.98*	*4.96*	*4.95*	*4.90*	*4.87*	**5.10**	*5.03*	*4.92*
Net Imports (including SPR) [b]	**6.12**	**7.06**	**7.66**	**7.00**	**6.74**	*7.18*	*8.08*	*7.35*	*7.01*	*7.75*	*8.18*	*7.60*	**6.96**	*7.34*	*7.64*
Gross Imports (excluding SPR)	**6.17**	**7.15**	**7.74**	**7.12**	**6.83**	*7.30*	*8.16*	*7.45*	*7.12*	*7.86*	*8.26*	*7.70*	**7.05**	*7.44*	*7.74*
SPR Imports	**0.03**	**0.02**	**0.00**	**0.00**	**0.00**	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	**0.01**	*0.00*	*0.00*
Exports	**0.09**	**0.11**	**0.07**	**0.12**	**0.09**	*0.11*	*0.08*	*0.10*	*0.12*	*0.11*	*0.08*	*0.10*	**0.10**	*0.10*	*0.10*
Other SPR Supply	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	*0.00*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	**0.00**	*0.01*	*0.01*
SPR Stock Withdrawn or Added (-)	**-0.04**	**-0.02**	**0.00**	**0.00**	**0.00**	*0.00*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	**-0.01**	*-0.01*	*-0.01*
Other Stock Withdrawn or Added (-)	**-0.08**	**0.16**	**-0.08**	**-0.02**	**-0.01**	*0.19*	*-0.13*	*-0.03*	*0.00*	*-0.02*	*-0.01*	*0.03*	**-0.01**	*0.01*	*0.00*
Product Supplied and Losses	**-0.01**	**-0.01**	**-0.01**	**-0.01**	**-0.01**	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	**-0.01**	*-0.01*	*-0.01*
Unaccounted-for Crude Oil	**0.36**	**0.32**	**0.23**	**0.16**	**0.13**	*0.34*	*0.28*	*0.27*	*0.26*	*0.27*	*0.28*	*0.27*	**0.27**	*0.25*	*0.27*
Total Crude Oil Supply	**13.13**	**14.15**	**14.36**	**13.81**	**13.49**	*14.27*	*14.68*	*14.02*	*13.67*	*14.30*	*14.67*	*14.10*	**13.87**	*14.12*	*14.19*
Other Supply															
NGL Production	**1.64**	**1.71**	**1.77**	**1.79**	**1.77**	*1.72*	*1.71*	*1.74*	*1.74*	*1.72*	*1.71*	*1.75*	**1.73**	*1.74*	*1.73*
Other Hydrocarbon and Alcohol Inputs	**0.24**	**0.23**	**0.26**	**0.29**	**0.30**	*0.30*	*0.31*	*0.37*	*0.34*	*0.30*	*0.33*	*0.38*	**0.26**	*0.32*	*0.34*
Crude Oil Product Supplied	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	**0.01**	*0.01*	*0.01*
Processing Gain	**0.72**	**0.76**	**0.77**	**0.82**	**0.72**	*0.80*	*0.82*	*0.78*	*0.75*	*0.79*	*0.82*	*0.79*	**0.77**	*0.78*	*0.79*
Net Product Imports [c]	**1.33**	**1.22**	**1.10**	**0.72**	**0.71**	*0.64*	*1.18*	*0.98*	*1.00*	*1.14*	*0.99*	*1.10*	**1.09**	*0.88*	*1.06*
Gross Product Imports [c]	**2.16**	**1.99**	**1.92**	**1.66**	**1.61**	*1.64*	*2.11*	*1.96*	*1.94*	*2.04*	*1.87*	*2.08*	**1.93**	*1.83*	*1.98*
Product Exports	**0.83**	**0.77**	**0.82**	**0.95**	**0.90**	*1.00*	*0.93*	*0.98*	*0.94*	*0.90*	*0.88*	*0.98*	**0.84**	*0.95*	*0.92*
Product Stock Withdrawn or Added (-) [d]	**0.81**	**-0.58**	**-0.56**	**0.35**	**0.60**	*-0.36*	*-0.58*	*0.24*	*0.67*	*-0.52*	*-0.31*	*0.23*	**0.00**	*-0.03*	*0.02*
Total Supply	**17.89**	**17.49**	**17.70**	**17.79**	**17.61**	*17.38*	*18.11*	*18.14*	*18.18*	*17.75*	*18.22*	*18.35*	**17.72**	*17.81*	*18.13*
Demand															
Motor Gasoline	**7.21**	**7.71**	**7.83**	**7.65**	**7.48**	*7.96*	*7.99*	*7.68*	*7.61*	*8.01*	*8.13*	*7.83*	**7.60**	*7.78*	*7.90*
Jet Fuel	**1.51**	**1.52**	**1.54**	**1.54**	**1.52**	*1.42*	*1.67*	*1.66*	*1.57*	*1.54*	*1.61*	*1.59*	**1.53**	*1.57*	*1.58*
Distillate Fuel Oil	**3.53**	**3.03**	**2.95**	**3.15**	**3.45**	*3.06*	*3.04*	*3.26*	*3.52*	*3.13*	*3.07*	*3.31*	**3.16**	*3.20*	*3.26*
Residual Fuel Oil	**1.26**	**1.03**	**0.89**	**0.91**	**0.89**	*0.78*	*0.90*	*1.03*	*1.11*	*0.86*	*0.87*	*1.00*	**1.02**	*0.90*	*0.96*
Other Oils [e]	**4.38**	**4.21**	**4.49**	**4.55**	**4.28**	*4.16*	*4.53*	*4.52*	*4.37*	*4.21*	*4.54*	*4.61*	**4.41**	*4.37*	*4.43*
Total Demand	**17.89**	**17.49**	**17.70**	**17.79**	**17.62**	*17.38*	*18.12*	*18.14*	*18.18*	*17.75*	*18.22*	*18.35*	**17.72**	*17.81*	*18.13*
Total Petroleum Net Imports	**7.45**	**8.27**	**8.77**	**7.72**	**7.45**	*7.82*	*9.25*	*8.32*	*8.00*	*8.89*	*9.17*	*8.70*	**8.05**	*8.22*	*8.69*
Closing Stocks (million barrels)															
Crude Oil (excluding SPR) [f]	**342**	**328**	**335**	**337**	**338**	*321*	*332*	*335*	*335*	*337*	*338*	*335*	**337**	*335*	*335*
Total Motor Gasoline	**213**	**212**	**205**	**215**	**211**	*208*	*210*	*221*	*223*	*215*	*208*	*222*	**215**	*221*	*222*
Finished Motor Gasoline	**176**	**177**	**169**	**176**	**168**	*166*	*169*	*182*	*183*	*177*	*169*	*183*	**176**	*182*	*183*
Blending Components	**38**	**35**	**36**	**39**	**43**	*42*	*41*	*39*	*40*	*38*	*39*	*39*	**39**	*39*	*39*
Jet Fuel	**38**	**41**	**45**	**47**	**39**	*40*	*43*	*46*	*46*	*46*	*46*	*48*	**47**	*46*	*48*
Distillate Fuel Oil	**99**	**120**	**145**	**145**	**115**	*117*	*139*	*141*	*97*	*111*	*135*	*139*	**145**	*141*	*139*
Residual Fuel Oil	**42**	**39**	**44**	**42**	**38**	*35*	*40*	*44*	*37*	*40*	*40*	*42*	**42**	*44*	*42*
Other Oils [g]	**260**	**293**	**317**	**275**	**266**	*303*	*324*	*281*	*270*	*309*	*320*	*277*	**275**	*281*	*277*
Total Stocks (excluding SPR)	**994**	**1033**	**1092**	**1061**	**1007**	*1023*	*1088*	*1069*	*1008*	*1057*	*1087*	*1063*	**1061**	*1069*	*1063*
Crude Oil in SPR	**590**	**592**	**592**	**592**	**592**	*592*	*593*	*594*	*595*	*596*	*598*	*599*	**592**	*594*	*599*
Total Stocks (including SPR)	**1584**	**1624**	**1684**	**1653**	**1599**	*1614*	*1680*	*1663*	*1603*	*1653*	*1684*	*1661*	**1653**	*1663*	*1661*

[a] Includes lease condensate.

[b] Net imports equals gross imports plus SPR imports minus exports.

[c] Includes finished petroleum products, unfinished oils, gasoline blending components, and natural gas plant liquids for processing.

[d] Includes an estimate of minor product stock change based on monthly data.

[e] Includes crude oil product supplied, natural gas liquids, liquefied refinery gas, other liquids, and all finished petroleum products except motor gasoline, jet fuel, distillate, and residual fuel oil.

[f] Includes crude oil in transit to refineries.

[g] Includes stocks of all other oils such as aviation gasoline, kerosene, natural gas liquids (including ethane), aviation gasoline blending components, naphtha and other oils for petrochemical feedstock use, special naphthas, lube oils, wax, coke, asphalt, road oil, and miscellaneous oils.

SPR: Strategic Petroleum Reserve

NGL: Natural Gas Liquids

Notes: Minor discrepancies with other EIA published historical data are due to rounding. Historical data are printed in bold, forecasts are in italic. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration, *Petroleum Supply Monthly*, DOE/EIA-0109(93/01-95/06); and *Weekly Petroleum Status Report*, DOE/EIA-0208(various issues).

Table 7. U.S. Petroleum Supply and Demand: High World Oil Price Case

(Million Barrels per Day, Except Closing Stocks)

	1994				1995				1996				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1994	1995	1996
Supply															
Crude Oil Supply															
Domestic Production [a]	**6.78**	**6.64**	**6.55**	**6.68**	**6.63**	*6.57*	*6.52*	*6.53*	*6.51*	*6.43*	*6.37*	*6.36*	**6.66**	*6.56*	*6.42*
Alaska	**1.61**	**1.53**	**1.50**	**1.59**	**1.56**	*1.50*	*1.48*	*1.50*	*1.49*	*1.41*	*1.36*	*1.37*	**1.56**	*1.51*	*1.41*
Lower 48	**5.16**	**5.10**	**5.05**	**5.10**	**5.07**	*5.07*	*5.03*	*5.03*	*5.02*	*5.03*	*5.01*	*4.99*	**5.10**	*5.05*	*5.01*
Net Imports (including SPR) [b]	**6.12**	**7.06**	**7.66**	**7.00**	**6.74**	*7.18*	*8.02*	*7.23*	*6.85*	*7.56*	*7.96*	*7.36*	**6.96**	*7.30*	*7.43*
Gross Imports (excluding SPR)	**6.17**	**7.15**	**7.74**	**7.12**	**6.83**	*7.30*	*8.10*	*7.34*	*6.97*	*7.67*	*8.04*	*7.46*	**7.05**	*7.40*	*7.54*
SPR Imports	**0.03**	**0.02**	**0.00**	**0.00**	**0.00**	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	**0.01**	*0.00*	*0.00*
Exports	**0.09**	**0.11**	**0.07**	**0.12**	**0.09**	*0.11*	*0.08*	*0.10*	*0.12*	*0.11*	*0.08*	*0.10*	**0.10**	*0.10*	*0.10*
Other SPR Supply	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	*0.00*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	**0.00**	*0.01*	*0.01*
SPR Stock Withdrawn or Added (-)	**-0.04**	**-0.02**	**0.00**	**0.00**	**0.00**	*0.00*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	**-0.01**	*-0.01*	*-0.01*
Other Stock Withdrawn or Added (-)	**-0.08**	**0.16**	**-0.08**	**-0.02**	**-0.01**	*0.19*	*-0.13*	*-0.03*	*0.00*	*-0.02*	*-0.01*	*0.03*	**-0.01**	*0.01*	*0.00*
Product Supplied and Losses	**-0.01**	**-0.01**	**-0.01**	**-0.01**	**-0.01**	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	**-0.01**	*-0.01*	*-0.01*
Unaccounted-for Crude Oil	**0.36**	**0.32**	**0.23**	**0.16**	**0.13**	*0.34*	*0.28*	*0.27*	*0.26*	*0.27*	*0.28*	*0.27*	**0.27**	*0.25*	*0.27*
Total Crude Oil Supply	**13.13**	**14.15**	**14.36**	**13.81**	**13.49**	*14.27*	*14.67*	*13.98*	*13.61*	*14.23*	*14.59*	*14.01*	**13.87**	*14.11*	*14.11*
Other Supply															
NGL Production	**1.64**	**1.71**	**1.77**	**1.79**	**1.77**	*1.72*	*1.71*	*1.74*	*1.74*	*1.72*	*1.71*	*1.75*	**1.73**	*1.74*	*1.73*
Other Hydrocarbon and Alcohol Inputs	**0.24**	**0.23**	**0.26**	**0.29**	**0.30**	*0.30*	*0.31*	*0.37*	*0.34*	*0.30*	*0.33*	*0.38*	**0.26**	*0.32*	*0.34*
Crude Oil Product Supplied	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	**0.01**	*0.01*	*0.01*
Processing Gain	**0.72**	**0.76**	**0.77**	**0.82**	**0.72**	*0.80*	*0.82*	*0.78*	*0.75*	*0.79*	*0.81*	*0.78*	**0.77**	*0.78*	*0.78*
Net Product Imports [c]	**1.33**	**1.22**	**1.10**	**0.72**	**0.71**	*0.64*	*1.16*	*0.93*	*0.94*	*1.08*	*0.93*	*1.04*	**1.09**	*0.86*	*1.00*
Gross Product Imports [c]	**2.16**	**1.99**	**1.92**	**1.66**	**1.61**	*1.64*	*2.09*	*1.91*	*1.89*	*1.98*	*1.80*	*2.02*	**1.93**	*1.81*	*1.92*
Product Exports	**0.83**	**0.77**	**0.82**	**0.95**	**0.90**	*1.00*	*0.93*	*0.98*	*0.94*	*0.90*	*0.88*	*0.98*	**0.84**	*0.95*	*0.92*
Product Stock Withdrawn or Added (-) [d]	**0.81**	**-0.58**	**-0.56**	**0.35**	**0.60**	*-0.36*	*-0.58*	*0.23*	*0.67*	*-0.52*	*-0.32*	*0.23*	**0.00**	*-0.03*	*0.01*
Total Supply	**17.89**	**17.49**	**17.70**	**17.79**	**17.61**	*17.38*	*18.09*	*18.05*	*18.06*	*17.62*	*18.06*	*18.20*	**17.72**	*17.78*	*17.99*
Demand															
Motor Gasoline	**7.21**	**7.71**	**7.83**	**7.65**	**7.48**	*7.96*	*7.98*	*7.64*	*7.56*	*7.96*	*8.08*	*7.78*	**7.60**	*7.76*	*7.84*
Jet Fuel	**1.51**	**1.52**	**1.54**	**1.54**	**1.52**	*1.42*	*1.66*	*1.65*	*1.57*	*1.53*	*1.61*	*1.59*	**1.53**	*1.57*	*1.58*
Distillate Fuel Oil	**3.53**	**3.03**	**2.95**	**3.15**	**3.45**	*3.06*	*3.04*	*3.25*	*3.51*	*3.11*	*3.05*	*3.28*	**3.16**	*3.20*	*3.24*
Residual Fuel Oil	**1.26**	**1.03**	**0.89**	**0.91**	**0.89**	*0.78*	*0.89*	*1.00*	*1.07*	*0.82*	*0.81*	*0.95*	**1.02**	*0.89*	*0.92*
Other Oils [e]	**4.38**	**4.21**	**4.49**	**4.55**	**4.28**	*4.16*	*4.52*	*4.51*	*4.35*	*4.20*	*4.52*	*4.59*	**4.41**	*4.37*	*4.42*
Total Demand	**17.89**	**17.49**	**17.70**	**17.79**	**17.62**	*17.38*	*18.09*	*18.05*	*18.06*	*17.62*	*18.06*	*18.20*	**17.72**	*17.78*	*17.99*
Total Petroleum Net Imports	**7.45**	**8.27**	**8.77**	**7.72**	**7.45**	*7.82*	*9.17*	*8.16*	*7.80*	*8.65*	*8.88*	*8.40*	**8.05**	*8.16*	*8.43*
Closing Stocks (million barrels)															
Crude Oil (excluding SPR) [f]	**342**	**328**	**335**	**337**	**338**	*321*	*332*	*335*	*335*	*337*	*338*	*335*	**337**	*335*	*335*
Total Motor Gasoline	**213**	**212**	**205**	**215**	**211**	*208*	*210*	*221*	*223*	*215*	*208*	*222*	**215**	*221*	*222*
Finished Motor Gasoline	**176**	**177**	**169**	**176**	**168**	*166*	*169*	*182*	*183*	*177*	*169*	*183*	**176**	*182*	*183*
Blending Components	**38**	**35**	**36**	**39**	**43**	*42*	*41*	*39*	*40*	*38*	*39*	*39*	**39**	*39*	*39*
Jet Fuel	**38**	**41**	**45**	**47**	**39**	*40*	*43*	*46*	*46*	*46*	*46*	*48*	**47**	*46*	*48*
Distillate Fuel Oil	**99**	**120**	**145**	**145**	**115**	*117*	*139*	*141*	*97*	*111*	*136*	*140*	**145**	*141*	*140*
Residual Fuel Oil	**42**	**39**	**44**	**42**	**38**	*35*	*40*	*44*	*37*	*40*	*40*	*42*	**42**	*44*	*42*
Other Oils [g]	**260**	**293**	**317**	**275**	**266**	*303*	*324*	*281*	*270*	*309*	*321*	*278*	**275**	*281*	*278*
Total Stocks (excluding SPR)	**994**	**1033**	**1092**	**1061**	**1007**	*1023*	*1088*	*1069*	*1009*	*1058*	*1088*	*1064*	**1061**	*1069*	*1064*
Crude Oil in SPR	**590**	**592**	**592**	**592**	**592**	*592*	*593*	*594*	*595*	*596*	*598*	*599*	**592**	*594*	*599*
Total Stocks (including SPR)	**1584**	**1624**	**1684**	**1653**	**1599**	*1614*	*1681*	*1663*	*1604*	*1654*	*1686*	*1663*	**1653**	*1663*	*1663*

[a] Includes lease condensate.

[b] Net imports equals gross imports plus SPR imports minus exports.

[c] Includes finished petroleum products, unfinished oils, gasoline blending components, and natural gas plant liquids for processing.

[d] Includes an estimate of minor product stock change based on monthly data.

[e] Includes crude oil product supplied, natural gas liquids, liquefied refinery gas, other liquids, and all finished petroleum products except motor gasoline, jet fuel, distillate, and residual fuel oil.

[f] Includes crude oil in transit to refineries.

[g] Includes stocks of all other oils such as aviation gasoline, kerosene, natural gas liquids (including ethane), aviation gasoline blending components, naphtha and other oils for petrochemical feedstock use, special naphthas, lube oils, wax, coke, asphalt, road oil, and miscellaneous oils.

SPR: Strategic Petroleum Reserve

NGL: Natural Gas Liquids

Notes: Minor discrepancies with other EIA published historical data are due to rounding. Historical data are printed in bold, forecasts are in italic. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration, *Petroleum Supply Monthly*, DOE/EIA-0109(93/01-95/06); and *Weekly Petroleum Status Report*, DOE/EIA-0208(various issues).

Table 8. U.S. Petroleum Demand Sensitivities

	1995	1996
	Two Quarters[a]	Four Quarters[a]
Economic Activity		
Gross Domestic Product (billion 1987 dollars)	*5,486 - 5,501*	*5,494 - 5,669*
Resulting Change in Petroleum Demand (million barrels per day)[b]	*0.03*	*0.37*
Energy Prices		
Imported Crude Oil (nominal dollars per barrel)[c]	*$15.10 - $18.66*	*$14.34 - $21.17*
Resulting Change in Petroleum Demand (million barrels per day)[b]		
Due to Changes in the Crude Oil Price	*-0.12*	*-0.29*
Weather		
Heating Degree-Days (average per day)[d]	*16.39 - 20.57*	*20.31 - 24.03*
Resulting Change in Petroleum Demand (million barrels per day)	*0.35*	*0.54*
Cooling Degree-Days (average per day)[d]	*5.86 - 9.10*	*5.57 - 6.58*
Resulting Change in Petroleum Demand (million barrels per day)[b]	*0.04*	*0.15*

[a]In the weather case, calculations apply to certain quarters only, as follows: for heating degree-days: for 1995 the fourth quarter only is used; for 1996 the average of first and fourth quarters only are used; for cooling degree-days in 1995 the third quarter only is used; for 1996, the average of the second and third quarters is used.
[b]Ranges of petroleum product supplied associated with varying each determinant (or determinants), holding other things equal.
[c]Cost of imported crude oil to U.S. refiners.
[d]Heating and cooling degree-days are U.S. 1990 population-weighted.
Source: Energy Information Administration, Office of Energy Markets and End Use, Energy Markets and Contingency Information Division, Short-Term Integrated Forecasting System.

Table 9. Forecast Components for U.S. Crude Oil Production
(Million Barrels per Day)

	High Price Case	Low Price Case	Difference		
			Total	Uncertainty	Price Impact
United States	*6.36*	*5.92*	*0.44*	*0.12*	*0.33*
Lower 48 States	*4.99*	*4.62*	*0.37*	*0.08*	*0.29*
Alaska	*1.37*	*1.30*	*0.07*	*0.04*	*0.04*

Note: Components provided are for the fourth quarter 1996; totals are from Tables 5 and 7. Totals may not add to sum of components due to independent rounding.
Source: Energy Information Administration, Office of Oil and Gas, Reserves and Natural Gas Division.

Table 10. U.S. Natural Gas Supply and Demand: Mid World Oil Price Case
(Trillion Cubic Feet)

	1994				1995				1996				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1994	1995	1996
Supply															
Total Dry Gas Production [a]	**4.70**	**4.68**	**4.66**	**4.80**	**4.78**	*4.57*	*4.64*	*4.87*	*5.04*	*4.70*	*4.66*	*4.93*	**18.85**	*18.85*	*19.34*
Net Imports	**0.60**	**0.58**	**0.59**	**0.63**	**0.67**	*0.61*	*0.60*	*0.67*	*0.73*	*0.66*	*0.64*	*0.71*	**2.40**	*2.56*	*2.75*
Supplemental Gaseous Fuels	**0.04**	**0.03**	**0.03**	**0.03**	**0.04**	*0.03*	*0.03*	*0.04*	*0.03*	*0.03*	*0.02*	*0.03*	**0.13**	*0.13*	*0.12*
Total New Supply	**5.34**	**5.29**	**5.28**	**5.46**	**5.49**	*5.21*	*5.26*	*5.58*	*5.80*	*5.39*	*5.33*	*5.68*	**21.37**	*21.54*	*22.20*
Underground Working Gas Storage															
Opening	**6.65**	**5.30**	**6.25**	**7.27**	**6.97**	*5.69*	*6.32*	*7.25*	*6.84*	*5.66*	*6.51*	*7.40*	**6.65**	*6.97*	*6.84*
Closing	**5.30**	**6.25**	**7.27**	**6.97**	**5.69**	*6.32*	*7.25*	*6.84*	*5.66*	*6.51*	*7.40*	*6.90*	**6.97**	*6.84*	*6.90*
Net Withdrawals	**1.35**	**-0.95**	**-1.02**	**0.30**	**1.28**	*-0.64*	*-0.92*	*0.41*	*1.18*	*-0.85*	*-0.89*	*0.49*	**-0.32**	*0.13*	*-0.06*
Total Supply [a]	**6.69**	**4.35**	**4.26**	**5.76**	**6.77**	*4.57*	*4.34*	*5.99*	*6.98*	*4.54*	*4.44*	*6.17*	**21.06**	*21.66*	*22.14*
Balancing Item [b]	**0.17**	**0.09**	**-0.11**	**-0.49**	**-0.04**	*0.22*	*-0.10*	*-0.44*	*0.14*	*0.23*	*-0.13*	*-0.54*	**-0.33**	*-0.37*	*-0.30*
Total Primary Supply [a]	**6.86**	**4.44**	**4.16**	**5.27**	**6.72**	*4.79*	*4.24*	*5.55*	*7.12*	*4.77*	*4.31*	*5.64*	**20.73**	*21.30*	*21.84*
Demand															
Lease and Plant Fuel	**0.31**	**0.31**	**0.31**	**0.32**	**0.31**	*0.31*	*0.30*	*0.31*	*0.32*	*0.30*	*0.30*	*0.31*	**1.24**	*1.24*	*1.24*
Pipeline Use	**0.21**	**0.14**	**0.13**	**0.16**	**0.21**	*0.15*	*0.13*	*0.16*	*0.20*	*0.15*	*0.14*	*0.17*	**0.64**	*0.66*	*0.66*
Residential	**2.44**	**0.80**	**0.38**	**1.26**	**2.18**	*0.85*	*0.38*	*1.39*	*2.43*	*0.85*	*0.37*	*1.39*	**4.87**	*4.80*	*5.05*
Commercial	**1.27**	**0.54**	**0.38**	**0.75**	**1.17**	*0.57*	*0.39*	*0.84*	*1.32*	*0.59*	*0.39*	*0.85*	**2.94**	*2.97*	*3.15*
Industrial (Incl. Cogenerators)	**2.09**	**1.88**	**1.87**	**2.03**	**2.19**	*2.08*	*1.93*	*2.09*	*2.20*	*2.06*	*1.99*	*2.16*	**7.87**	*8.29*	*8.42*
Cogenerators [c]	**0.43**	**0.43**	**0.54**	**0.61**	**0.50**	*0.56*	*0.54*	*0.51*	*0.54*	*0.60*	*0.58*	*0.55*	**2.00**	*2.10*	*2.28*
Electricity Production															
Electric Utilities	**0.51**	**0.74**	**1.04**	**0.70**	**0.61**	*0.75*	*1.05*	*0.71*	*0.60*	*0.76*	*1.06*	*0.70*	**2.99**	*3.13*	*3.12*
Nonutilities (Excl. Cogen.)	**0.04**	**0.04**	**0.05**	**0.06**	**0.05**	*0.05*	*0.05*	*0.05*	*0.05*	*0.05*	*0.05*	*0.05*	**0.18**	*0.19*	*0.21*
Total Demand	**6.86**	**4.44**	**4.16**	**5.27**	**6.72**	*4.79*	*4.24*	*5.55*	*7.12*	*4.77*	*4.31*	*5.64*	**20.73**	*21.30*	*21.84*

[a]Excludes nonhydrocarbon gases removed.

[b]The balancing item represents the difference between the sum of the components of natural gas supply and the sum of components of natural gas demand.

[c]Quarterly estimates and projections for gas consumption by nonutility generators are based on estimates for quarterly gas-fired generation at nonutilities, supplied by the Office of Coal, Nuclear, Electric and Alternate Fuels (CNEAF), Energy Information Administration (EIA), based on annual data reported to EIA on Form EIA-867. Annual projections for nonutility gas consumption, as well as the detail on independent power producers' share of gas consumption, are provided by CNEAF.

Notes: Minor discrepancies with other EIA published historical data are due to rounding. Historical data are printed in bold, forecasts are in italic. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(95/06); *Natural Gas Monthly*, DOE/EIA-0130(95/06); *Electric Power Monthly*, DOE/EIA-0226(95/05); Projections: Energy Information Administration, Short-Term Integrated Forecasting System database, and Office of Oil and Gas, Reserves and Natural Gas Division.

Table 11. U.S. Coal Supply and Demand: Mid World Oil Price Case
(Million Short Tons)

	1994				1995				1996				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1994	1995	1996
Supply															
Production	**254.4**	**256.3**	**260.1**	**259.8**	**265.0**	*256.9*	*256.7*	*258.4*	*263.2*	*259.6*	*260.4*	*262.9*	**1030.6**	*1037.0*	*1046.1*
Primary Stock Levels [a]															
Opening	**25.3**	**34.1**	**35.8**	**33.0**	**33.2**	*42.3*	*39.0*	*35.0*	*35.0*	*37.0*	*36.0*	*34.0*	**25.3**	*33.2*	*35.0*
Closing	**34.1**	**35.8**	**33.0**	**33.2**	**42.3**	*39.0*	*35.0*	*35.0*	*37.0*	*36.0*	*34.0*	*36.0*	**33.2**	*35.0*	*36.0*
Net Withdrawals	**-8.9**	**-1.6**	**2.8**	**-0.3**	**-9.1**	*3.3*	*4.0*	*(S)*	*-2.0*	*1.0*	*2.0*	*-2.0*	**-7.9**	*-1.8*	*-1.0*
Imports	**1.8**	**1.6**	**2.3**	**1.9**	**1.8**	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*	**7.6**	*7.7*	*7.9*
Exports	**14.9**	**17.9**	**19.7**	**18.8**	**19.0**	*19.8*	*19.7*	*19.9*	*20.5*	*21.2*	*21.3*	*21.2*	**71.4**	*78.5*	*84.3*
Total Net Domestic Supply	**232.5**	**238.3**	**245.5**	**242.6**	**238.7**	*242.4*	*243.0*	*240.4*	*242.6*	*241.3*	*243.1*	*241.7*	**958.9**	*964.5*	*968.7*
Secondary Stock Levels [b]															
Opening	**120.5**	**112.3**	**126.6**	**121.2**	**136.1**	*143.5*	*166.4*	*155.1*	*154.0*	*154.4*	*172.6*	*160.3*	**120.5**	*136.1*	*154.0*
Closing	**112.3**	**126.6**	**121.2**	**136.1**	**143.5**	*166.4*	*155.1*	*154.0*	*154.4*	*172.6*	*160.3*	*161.9*	**136.1**	*154.0*	*161.9*
Net Withdrawals	**8.2**	**-14.4**	**5.5**	**-14.9**	**-7.4**	*-23.0*	*11.3*	*1.1*	*-0.4*	*-18.2*	*12.2*	*-1.6*	**-15.6**	*-17.9*	*-7.9*
Total Supply	**240.7**	**223.9**	**251.0**	**227.7**	**231.3**	*219.4*	*254.3*	*241.5*	*242.3*	*223.1*	*255.4*	*240.1*	**943.3**	*946.5*	*960.8*
Demand															
Coke Plants	**7.8**	**8.0**	**7.9**	**8.1**	**8.1**	*7.9*	*8.0*	*8.1*	*8.1*	*7.9*	*7.9*	*8.0*	**31.7**	*32.2*	*31.9*
Electricity Production															
Electric Utilities	**207.9**	**196.3**	**218.6**	**194.5**	**199.0**	*188.9*	*224.7*	*209.0*	*209.4*	*192.9*	*225.5*	*207.0*	**817.3**	*821.7*	*834.7*
Nonutilities (Excl. Cogen.) [c]	**2.1**	**2.1**	**2.1**	**2.1**	**2.7**	*2.7*	*2.7*	*2.7*	*3.3*	*3.3*	*3.3*	*3.3*	**8.4**	*10.7*	*13.1*
Retail and General Industry [d]	**21.9**	**18.9**	**19.2**	**21.0**	**20.6**	*19.9*	*18.9*	*21.7*	*21.5*	*19.1*	*18.8*	*21.7*	**81.0**	*81.1*	*81.1*
Total Demand	**239.7**	**225.2**	**247.8**	**225.7**	**230.5**	*219.4*	*254.3*	*241.5*	*242.3*	*223.1*	*255.4*	*240.1*	**938.4**	*945.7*	*960.8*
Discrepancy [e]	**1.0**	**-1.3**	**3.2**	**2.0**	**0.9**	*(S)*	*(S)*	*(S)*	*(S)*	*(S)*	*(S)*	*(S)*	**4.9**	*0.9*	*(S)*

[a]Primary stocks are held at the mines, preparation plants, and distribution points.

[b]Secondary stocks are held by users.

[c]Consumption of coal by Independent Power Producers (IPPs). In 1993, IPP consumption was estimated to be 1.5 million tons per quarter. Quarterly estimates and projections for coal consumption by nonutility generators are based on estimates for quarterly coal-fired generation at nonutilities, supplied by the Office of Coal, Nuclear, Electric and Alternate Fuels, Energy Information Administration (EIA), based on annual data reported to EIA on Form EIA-867. Data for 1994 and first quarter 1995 are estimates.

[d]Synfuels plant demand in 1993 was 1.7 million tons per quarter, and is assumed to remain at that level in 1994, 1995, and 1996.

[e]Historical period discrepancy reflects an unaccounted-for shipper and receiver reporting difference. Forecast discrepancy identically zero by assumption.

(S) indicates amounts of less than 50,000 tons in absolute value.

Notes: Rows and columns may not add due to independent rounding. Historical data are printed in bold, forecasts are in italic. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(95/06); and *Quarterly Coal Report*, DOE/EIA-0121(95/1Q); Projections: Energy Information Administration, Short-Term Integrated Forecasting System database, and Office of Coal, Nuclear, Electric and Alternate Fuels.

Table 12. U.S. Electricity Supply and Demand: Mid World Oil Price Case
(Billion Kilowatthours)

	1994				1995				1996				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1994	1995	1996
Supply															
Net Utility Generation															
Coal	**417.4**	**393.6**	**435.6**	**388.8**	**398.3**	*379.5*	*451.5*	*421.1*	*420.4*	*386.8*	*451.0*	*414.5*	**1635.5**	*1650.4*	*1672.7*
Petroleum	**32.2**	**24.6**	**20.4**	**13.9**	**14.3**	*16.8*	*22.2*	*19.1*	*21.2*	*17.6*	*21.6*	*18.3*	**91.0**	*72.4*	*78.7*
Natural Gas	**49.5**	**71.7**	**100.9**	**69.1**	**59.6**	*71.6*	*99.6*	*67.3*	*56.7*	*72.1*	*99.9*	*66.2*	**291.1**	*298.2*	*294.8*
Nuclear	**155.6**	**143.5**	**174.9**	**166.5**	**167.1**	*162.5*	*177.4*	*148.8*	*170.0*	*153.5*	*178.5*	*161.6*	**640.4**	*655.7*	*663.6*
Hydroelectric	**61.2**	**70.9**	**56.5**	**55.1**	**74.7**	*78.0*	*67.2*	*64.4*	*75.4*	*77.9*	*64.1*	*62.7*	**243.7**	*284.3*	*280.1*
Geothermal and Other [a]	**2.3**	**2.1**	**2.2**	**2.3**	**1.4**	*1.7*	*2.1*	*2.1*	*2.0*	*2.0*	*2.0*	*2.0*	**8.9**	*7.3*	*8.0*
Subtotal	**718.3**	**706.4**	**790.5**	**695.6**	**715.4**	*710.1*	*820.0*	*722.8*	*745.7*	*709.8*	*817.1*	*725.3*	**2910.7**	*2968.3*	*2997.9*
Nonutility Generation [b]															
Coal	**12.1**	**12.0**	**15.1**	**17.2**	**14.0**	*15.5*	*14.9*	*14.3*	*14.9*	*16.5*	*15.9*	*15.2*	**56.3**	*58.7*	*62.6*
Petroleum	**3.0**	**3.0**	**3.8**	**4.3**	**3.6**	*4.0*	*3.8*	*3.7*	*3.9*	*4.3*	*4.2*	*4.0*	**14.1**	*15.1*	*16.4*
Natural Gas	**37.0**	**36.7**	**46.2**	**52.7**	**42.9**	*47.5*	*45.8*	*43.7*	*45.7*	*50.6*	*48.8*	*46.6*	**172.7**	*179.9*	*191.7*
Other Gaseous Fuels [c]	**2.9**	**2.8**	**3.6**	**4.1**	**3.3**	*3.7*	*3.5*	*3.4*	*3.5*	*3.9*	*3.8*	*3.6*	**13.3**	*13.9*	*14.8*
Hydroelectric	**2.5**	**2.5**	**3.1**	**3.6**	**3.0**	*3.3*	*3.2*	*3.0*	*3.2*	*3.5*	*3.4*	*3.3*	**11.7**	*12.4*	*13.4*
Geothermal and Other [d]	**16.8**	**16.7**	**21.0**	**24.0**	**19.2**	*21.3*	*20.5*	*19.6*	*20.3*	*22.4*	*21.6*	*20.6*	**78.5**	*80.6*	*85.0*
Subtotal	**74.3**	**73.7**	**92.7**	**105.8**	**86.0**	*95.2*	*91.8*	*87.6*	*91.6*	*101.3*	*97.7*	*93.3*	**346.6**	*360.5*	*383.9*
Total Generation	**792.6**	**780.1**	**883.2**	**801.5**	**801.4**	*805.2*	*911.8*	*810.4*	*837.3*	*811.2*	*914.8*	*818.6*	**3257.3**	*3328.8*	*3381.9*
Net Imports [e]	**11.4**	**9.8**	**10.7**	**10.4**	**8.3**	*9.3*	*10.4*	*9.9*	*9.2*	*9.8*	*11.2*	*10.3*	**42.4**	*38.0*	*40.4*
Total Supply	**804.0**	**789.9**	**893.9**	**811.9**	**809.7**	*814.6*	*922.2*	*820.3*	*846.4*	*821.0*	*926.0*	*828.9*	**3299.7**	*3366.8*	*3422.3*
Lost and Unaccounted for [f]	**46.0**	**67.8**	**53.1**	**67.8**	**46.5**	*65.5*	*63.6*	*61.8*	*47.1*	*67.9*	*62.8*	*61.5*	**234.8**	*237.3*	*239.4*
Demand															
Electric Utility Sales															
Residential	**272.6**	**220.2**	**284.9**	**228.0**	**262.7**	*226.3*	*292.6*	*241.6*	*283.4*	*227.7*	*292.8*	*243.5*	**1005.8**	*1023.3*	*1047.5*
Commercial	**195.5**	**200.8**	**231.9**	**199.0**	**198.2**	*208.3*	*241.5*	*208.3*	*210.9*	*209.0*	*241.1*	*208.7*	**827.3**	*856.3*	*869.7*
Industrial	**235.5**	**247.5**	**260.2**	**249.3**	**243.3**	*252.7*	*261.9*	*249.4*	*244.1*	*252.5*	*264.7*	*254.1*	**992.4**	*1007.4*	*1015.3*
Other	**23.5**	**23.0**	**25.2**	**23.7**	**23.8**	*22.9*	*25.2*	*23.4*	*23.9*	*23.1*	*25.2*	*23.5*	**95.3**	*95.2*	*95.8*
Subtotal	**727.1**	**691.5**	**802.2**	**700.1**	**728.0**	*710.2*	*821.2*	*722.7*	*762.4*	*712.2*	*823.8*	*729.8*	**2920.9**	*2982.2*	*3028.3*
Nonutility Gener. for Own Use [b]	**30.9**	**30.6**	**38.5**	**44.0**	**35.1**	*38.9*	*37.5*	*35.8*	*36.9*	*40.8*	*39.4*	*37.6*	**144.0**	*147.4*	*154.7*
Total Demand	**758.0**	**722.1**	**840.7**	**744.0**	**763.2**	*749.1*	*858.7*	*758.5*	*799.3*	*753.0*	*863.2*	*767.4*	**3064.9**	*3129.5*	*3182.9*
Memo:															
Nonutility Sales to Electric Utilities [b]	**43.4**	**43.1**	**54.2**	**61.8**	**50.8**	*56.3*	*54.3*	*51.8*	*54.7*	*60.5*	*58.4*	*55.7*	**202.5**	*213.2*	*229.3*

[a] Other includes generation from wind, wood, waste, and solar sources.

[b] Electricity from nonutility sources, including cogenerators and small power producers. Quarterly estimates and projections for nonutility net sales, own use, and generation by fuel source supplied by the Office of Coal, Nuclear, Electric and Alternate Fuels, Energy Information Administration (EIA), based on annual data reported to EIA on Form EIA-867, "Annual Nonutility Power Producer Report." Data for 1994 and first quarter 1995 are estimates.

[c] Includes refinery still gas and other process or waste gases, and liquefied petroleum gases.

[d] Includes geothermal, solar, wind, wood, waste, nuclear, hydrogen, sulfur, batteries, chemicals and spent sulfite liquor.

[e] Data for 1994 and first quarter 1995 are estimates.

[f] Balancing item, mainly transmission and distribution losses.

Notes: Minor discrepancies with other EIA published historical data are due to rounding. Historical data are printed in bold, forecasts are in italic. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(95/06); *Electric Power Monthly*, DOE/EIA-0226(95/05); Projections: Energy Information Administration, Short-Term Integrated Forecasting System database, and Office of Coal, Nuclear, Electric and Alternate Fuels.

In previous issues, the "Natural Gas" category in nonutility electricity generation included generation from certain energy sources not generally classified as natural gas, including refinery still gas and other process gases, liquefied petroleum gases and waste heat energy. Beginning with this issue these items will be placed in a separate category "Other Gaseous Fuels."

Table 13. U.S. Renewable Energy Use by Sector: Mid World Oil Price Case
(Quadrillion Btu)

	Year				Annual Percentage Change		
	1993	1994	1995	1996	1993-1994	1994-1995	1995-1996
Electric Utilities							
Hydroelectric Power [a]	**2.765**	**2.554**	*2.980*	*2.936*	**-7.6**	*16.7*	*-1.5*
Geothermal, Solar and Wind Energy [b]	**0.159**	**0.146**	*0.115*	*0.129*	**-8.2**	*-21.2*	*12.2*
Biofuels [c]	**0.021**	**0.021**	*0.019*	*0.019*	**0.0**	*-9.5*	*0.0*
Total	**2.944**	**2.721**	*3.113*	*3.085*	**-7.6**	*14.4*	*-0.9*
Nonutility Power Generators							
Hydroelectric Power [a]	**0.119**	**0.121**	*0.128*	*0.139*	**1.7**	*5.8*	*8.6*
Geothermal, Solar and Wind Energy [b]	**0.142**	**0.153**	*0.159*	*0.170*	**7.7**	*3.9*	*6.9*
Biofuels [c]	**0.577**	**0.618**	*0.633*	*0.666*	**7.1**	*2.4*	*5.2*
Total	**0.838**	**0.892**	*0.921*	*0.974*	**6.4**	*3.3*	*5.8*
Total Power Generation	**3.782**	**3.613**	*4.034*	*4.059*	**-4.5**	*11.7*	*0.6*
Other Sectors							
Residential and Commercial [d]	**0.735**	**0.745**	*0.725*	*0.745*	**1.4**	*-2.7*	*2.8*
Industrial [e]	**1.519**	**1.572**	*1.593*	*1.625*	**3.5**	*1.3*	*2.0*
Transportation [f]	**0.076**	**0.086**	*0.090*	*0.093*	**13.2**	*4.7*	*3.3*
Total	**2.330**	**2.403**	*2.409*	*2.463*	**3.1**	*0.2*	*2.2*
Net Imported Electricity [g]	**0.293**	**0.439**	*0.393*	*0.418*	**49.8**	*-10.5*	*6.4*
Total Renewable Energy Demand	**6.405**	**6.454**	*6.836*	*6.940*	**0.8**	*5.9*	*1.5*

[a]Conventional hydroelectric power only. Hydroelectricity generated by pumped storage is not included in renewable energy.
[b]Also includes photovoltaic thermal energy.
[c]Biofuels are fuelwood, wood byproducts, waste wood, municipal solid waste, manufacturing process waste, and alcohol fuels.
[d]Includes biofuels and solar energy consumed in the residential and commercial sectors.
[e]Includes industrial hydroelectric power, geothermal energy, biofuels, solar and wind energy consumed in the industrial sector, including consumption by nonutility power generators.
[f]Ethanol blended into gasoline.
[g]Net imports of electricity are included in renewables because they stem principally from hydroelectric power generators in Canada. However, it should be noted that in actuality, only about 77 percent of gross imports of electricity from Canada were attributable to renewable energy sources in 1993, based on statistics from Natural Resources Canada, *Electric Power in Canada 1993* (Ottawa: 1994), p. 89.

(S) Less than 500 billion Btu. (S) indicates amounts of less than 500 billion Btu.

NM indicates percent change calculations are not meaningful or undefined at the precision level of this table.

Notes: Minor discrepancies with other published EIA historical data are due to independent rounding. Historical data are printed in bold, forecasts are in italic. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: 1993: Estimates derived from Energy Information Administration, Short-Term Integrated Forecasting System database, and Office of Coal, Nuclear, Electric and Alternate Fuels Energy Information Administration; Projections: Renewables growth in sectors other than electric utilities taken from Energy Information Administration, *Annual Energy Outlook 1995* database and Office of Coal, Nuclear, Electric and Alternate Fuels Energy Information Administration.

Table A1. Annual U.S. Energy Supply and Demand

	Year														
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Real Gross Domestic Product (GDP) (billion 1987 dollars)	3760	3907	4149	4280	4404	4540	4719	4838	4897	4868	4979	5135	5344	*5483*	*5582*
Imported Crude Oil Price [a] (nominal dollars per barrel)	33.55	29.30	28.88	26.99	14.00	18.13	14.57	18.08	21.75	18.70	18.20	16.15	15.52	*17.17*	*17.75*
Petroleum Supply															
Crude Oil Production [b] (million barrels per day)	8.65	8.69	8.88	8.97	8.68	8.35	8.14	7.61	7.36	7.42	7.17	6.85	6.66	*6.53*	*6.29*
Total Petroleum Net Imports (including SPR) (million barrels per day)	4.31	4.31	4.71	4.29	5.44	5.92	6.59	7.20	7.15	6.58	6.94	7.62	8.05	*8.22*	*8.69*
Energy Demand															
World Petroleum (million barrels per day)	59.7	59.0	59.9	60.6	62.2	63.4	65.2	66.0	66.2	66.8	66.6	66.6	67.5	*68.5*	*69.7*
U.S. Petroleum (million barrels per day)	15.31	15.24	15.76	15.78	16.33	16.72	17.34	17.37	17.04	16.77	17.10	17.24	17.72	*17.81*	*18.13*
Natural Gas (trillion cubic feet)	18.00	16.83	17.95	17.28	16.22	17.21	18.03	18.80	18.72	19.03	19.54	20.29	20.73	*21.30*	*21.84*
Coal (million short tons)	707	737	791	818	804	837	884	890	895	888	892	932	938	*946*	*961*
Electricity (billion kilowatthours)															
Utility Sales [c]	2086	2151	2286	2324	2369	2457	2578	2647	2713	2762	2763	2861	2921	*2982*	*3028*
Nonutility Own Use [d]	NA	NA	NA	NA	NA	NA	NA	108	113	122	132	138	144	*147*	*155*
Total	NA	NA	NA	NA	NA	NA	NA	2755	2826	2884	2895	2999	3065	*3130*	*3183*
Total Energy Demand [e] (quadrillion Btu)	70.9	70.6	74.2	74.0	74.3	76.9	80.2	81.3	81.3	81.1	82.2	83.8	85.7	*87.1*	*88.8*
Total Energy Demand per Dollar of GDP (thousand Btu per 1987 Dollar)	18.86	18.06	17.88	17.29	16.88	16.94	17.01	16.81	16.60	16.67	16.50	16.32	16.03	*15.89*	*15.91*
Adjusted Total Energy Demand [e] (quadrillion Btu)	NA	NA	NA	NA	NA	NA	NA	NA	83.9	83.9	85.2	86.9	89.0	*90.5*	*92.3*
Adjusted Total Energy Demand per Dollar of GDP (thousand Btu per 1987 Dollar)	NA	NA	NA	NA	NA	NA	NA	NA	17.12	17.24	17.10	16.93	16.66	*16.51*	*16.53*

[a]Refers to the imported cost of crude oil to U.S. refiners assumed for the scenario depicted. In all cases on this table, the mid macroeconomic case and normal weather are used.

[b]Includes lease condensate.

[c]Total annual electric utility sales for historical periods are derived from the sum of monthly sales figures based on submissions by electric utilities of Form EIA-826, "Monthly Electric Utility Sales and Revenue Report with State Distributions." These historical values differ from annual sales totals based on Form EIA-861, reported in several EIA publications, but match alternate annual totals reported in EIA's *Electric Power Monthly*, DOE/EIA-0226.

[d]Defined as the difference between total nonutility electricity generation and sales to electric utilities by nonutility generators, reported on Form EIA-867, "Annual Nonutility Power Producer Report." Data for 1994 are estimates.

[e]"Total Energy Demand" refers to the aggregate energy presented in Energy Information Administration, *Annual Energy Review (AER)*, DOE/EIA-0384, Table 1.3. "Adjusted Total Energy Demand" refers to a broader concept, found in Energy Information Administration, *Annual Energy Review, 1993*, DOE/EIA-0384(93), Table 1, which includes certain dispersed renewable energy items, data for which are not available over an extended period or on a high frequency basis. The conversion from physical units to Btu is calculated using a subset of conversion factors used in the calculations performed for gross energy consumption in Energy Information Administration, *Monthly Energy Review* (*MER*). Consequently, the historical data may not precisely match that published in the *MER* or the *AER*.

SPR: Strategic Petroleum Reserve.

Notes: Minor discrepancies with other published EIA historical data are due to independent rounding. Historical data are printed in bold, forecasts are in italic. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(95/06); *Petroleum Supply Monthly*, DOE/EIA-0109(95/06); *Petroleum Supply Annual 1993*, DOE/EIA-0340(93)/2; *Natural Gas Monthly*, DOE/EIA-0130(95/06); *Electric Power Monthly*, DOE/EIA-0226(95/05); and *Quarterly Coal Report*, DOE/EIA-0121(94/4Q). Macroeconomic projections are based on DRI/McGraw-Hill Forecast CONTROL0695.

Table A2. Annual U.S. Macroeconomic and Weather Indicators

	Year														
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Macroeconomic															
Real Gross Domestic Product (billion 1987 dollars)	**3760**	**3907**	**4149**	**4280**	**4404**	**4540**	**4719**	**4838**	**4897**	**4868**	**4979**	**5135**	**5344**	*5483*	*5582*
GDP Implicit Price Deflator (Index, 1987=1.000)	**0.838**	**0.871**	**0.910**	**0.944**	**0.969**	**1.000**	**1.038**	**1.086**	**1.133**	**1.176**	**1.209**	**1.235**	**1.261**	*1.287*	*1.318*
Real Disposable Personal Income (billion 1987 Dollars)	**2820**	**2894**	**3080**	**3162**	**3262**	**3290**	**3404**	**3465**	**3524**	**3538**	**3648**	**3704**	**3836**	*3954*	*4019*
Manufacturing Production (Index, 1987=1.000)	**0.766**	**0.809**	**0.893**	**0.916**	**0.943**	**1.000**	**1.047**	**1.064**	**1.061**	**1.040**	**1.081**	**1.130**	**1.198**	*1.229*	*1.252*
Real Fixed Investment (billion 1987 dollars)	**558**	**595**	**690**	**724**	**727**	**723**	**753**	**754**	**741**	**685**	**723**	**805**	**904**	*978*	*997*
Real Exchange Rate (index)	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**0.996**	**1.012**	**1.015**	**1.063**	**1.040**	*0.951*	*0.930*
Business Inventory Change (billion 1987 dollars)	**-12.8**	**0.6**	**27.5**	**-3.7**	**-2.1**	**6.6**	**15.1**	**18.6**	**3.0**	**-6.2**	**-10.2**	**-0.8**	**4.8**	*4.8*	*-8.0*
Producer Price Index (index, 1980-1984=1.000)	**1.000**	**1.013**	**1.037**	**1.032**	**1.002**	**1.028**	**1.069**	**1.122**	**1.163**	**1.165**	**1.172**	**1.189**	**1.205**	*1.251*	*1.283*
Consumer Price Index (index, 1980-1984=1.000)	**0.965**	**0.996**	**1.039**	**1.076**	**1.097**	**1.137**	**1.184**	**1.240**	**1.308**	**1.363**	**1.404**	**1.446**	**1.483**	*1.529*	*1.579*
Petroleum Product Price Index (index, 1980-1984=1.000)	**1.000**	**0.899**	**0.874**	**0.832**	**0.532**	**0.568**	**0.539**	**0.612**	**0.748**	**0.671**	**0.647**	**0.620**	**0.591**	*0.601*	*0.652*
Non-Farm Employment (millions)	**89.6**	**90.1**	**94.4**	**97.4**	**99.3**	**102.0**	**105.2**	**107.9**	**109.4**	**108.3**	**108.6**	**110.7**	**114.1**	*116.5*	*117.8*
Commercial Employment (millions)	**53.8**	**54.9**	**58.0**	**60.8**	**62.9**	**65.2**	**67.8**	**70.0**	**71.3**	**70.8**	**71.2**	**73.2**	**76.0**	*78.3*	*79.8*
Total Industrial Production (index, 1987=1.000)	**0.819**	**0.849**	**0.928**	**0.944**	**0.953**	**1.000**	**1.045**	**1.061**	**1.061**	**1.043**	**1.077**	**1.121**	**1.181**	*1.207*	*1.229*
Housing Stock (millions)	**91.1**	**92.4**	**94.5**	**96.3**	**98.0**	**99.8**	**101.6**	**102.9**	**103.5**	**104.5**	**105.5**	**106.8**	**108.2**	*109.7*	*111.0*
Weather [a]															
Heating Degree-Days															
U.S.	**4619**	**4627**	**4514**	**4642**	**4295**	**4334**	**4653**	**4726**	**4016**	**4200**	**4441**	**4700**	**4462**	*4403*	*4603*
New England	**6697**	**6305**	**6442**	**6571**	**6517**	**6546**	**6715**	**6887**	**5848**	**5960**	**6844**	**6728**	**6672**	*6407*	*6660*
Middle Atlantic	**5866**	**5733**	**5777**	**5660**	**5665**	**5699**	**6088**	**6134**	**4998**	**5177**	**5964**	**5948**	**5934**	*5604*	*5875*
U.S. Gas-Weighted	**4853**	**4810**	**4704**	**4856**	**4442**	**4391**	**4779**	**4856**	**4139**	**4337**	**4458**	**4754**	**4659**	*4543*	*4786*
Cooling Degree-Days (U.S.)	**1136**	**1260**	**1214**	**1194**	**1249**	**1269**	**1283**	**1156**	**1260**	**1331**	**1040**	**1218**	**1210**	*1165*	*1193*

[a]Population-weighted degree days. A degree day indicates the temperature variation from 65 degrees Fahrenheit (calculated as the simple average of the daily minimum and maximum temperatures) weighted by 1990 population. Normal is used for the forecast period and is defined as the average number of degree days between 1961 and 1990 for a given period.

Note: Historical data are printed in bold, forecasts are in italic.

Sources: Historical data: Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(95/06); U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, May 1995; U.S. Department of Commerce, National Oceanic and Atmospheric Administration, *Monthly State, Regional, and National Heating/Cooling Degree Days Weighted by Population*; Federal Reserve System, *Statistical Release G.17(419)*, May 1995. Macroeconomic projections are based on DRI/McGraw-Hill Forecast CONTROL0695.

Table A3. Annual International Petroleum Supply and Demand Balance

(Millions Barrels per Day Except Closing Stocks)

	Year														
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Demand [a]															
OECD															
U.S. (50 States)	**15.5**	**15.5**	**15.8**	**15.8**	**16.3**	**16.7**	**17.3**	**17.4**	**17.0**	**16.8**	**17.1**	**17.2**	**17.7**	*17.8*	*18.1*
Europe [b]	**12.4**	**12.1**	**12.1**	**12.0**	**12.5**	**12.6**	**12.7**	**12.8**	**12.6**	**13.4**	**13.6**	**13.5**	**13.6**	*13.8*	*14.0*
Japan	**4.6**	**4.4**	**4.6**	**4.4**	**4.4**	**4.5**	**4.8**	**5.0**	**5.1**	**5.3**	**5.4**	**5.4**	**5.7**	*5.8*	*5.9*
Other OECD	**2.5**	**2.4**	**2.5**	**2.5**	**2.5**	**2.5**	**2.6**	**2.7**	**2.7**	**2.7**	**2.7**	**2.8**	**2.9**	*3.0*	*3.0*
Total OECD	**35.0**	**34.4**	**34.9**	**34.7**	**35.7**	**36.3**	**37.5**	**37.9**	**37.5**	**38.1**	**38.8**	**38.9**	**39.9**	*40.4*	*40.9*
Non-OECD															
Former Soviet Union	**9.1**	**9.0**	**8.9**	**9.0**	**9.0**	**9.0**	**8.9**	**8.7**	**8.4**	**8.4**	**6.8**	**5.8**	**4.9**	*4.5*	*4.2*
Europe	**1.8**	**1.8**	**1.8**	**2.2**	**2.2**	**2.2**	**2.2**	**2.1**	**2.0**	**1.3**	**1.3**	**1.2**	**1.2**	*1.3*	*1.3*
China	**1.7**	**1.7**	**1.7**	**1.9**	**2.0**	**2.1**	**2.3**	**2.4**	**2.3**	**2.5**	**2.7**	**3.1**	**3.3**	*3.5*	*3.7*
Other Asia	**3.5**	**3.5**	**3.7**	**3.7**	**3.9**	**4.1**	**4.4**	**4.9**	**5.3**	**5.7**	**6.1**	**6.4**	**6.8**	*7.1*	*7.5*
Other Non-OECD	**8.6**	**8.7**	**8.9**	**9.1**	**9.5**	**9.7**	**10.0**	**10.4**	**10.7**	**10.8**	**10.9**	**11.2**	**11.4**	*11.8*	*12.1*
Total Non-OECD	**24.7**	**24.7**	**25.1**	**25.9**	**26.5**	**27.1**	**27.7**	**28.5**	**28.7**	**28.6**	**27.8**	**27.7**	**27.6**	*28.2*	*28.7*
Total World Demand	**59.7**	**59.0**	**59.9**	**60.6**	**62.2**	**63.4**	**65.2**	**66.4**	**66.2**	**66.8**	**66.6**	**66.6**	**67.5**	*68.5*	*69.7*
Supply [c]															
OECD															
U.S. (50 States)	**10.8**	**10.8**	**11.1**	**11.2**	**10.9**	**10.6**	**10.5**	**9.9**	**9.7**	**9.9**	**9.8**	**9.6**	**9.4**	*9.4*	*9.1*
Canada	**1.6**	**1.7**	**1.8**	**1.8**	**1.8**	**2.0**	**2.0**	**2.0**	**2.0**	**2.0**	**2.1**	**2.2**	**2.3**	*2.4*	*2.4*
North Sea [d]	**2.7**	**3.1**	**3.4**	**3.6**	**3.8**	**3.8**	**3.8**	**3.7**	**3.9**	**4.0**	**4.3**	**4.6**	**5.4**	*5.7*	*6.1*
Other OECD	**1.1**	**1.2**	**1.3**	**1.4**	**1.3**	**1.4**	**1.4**	**1.3**	**1.5**	**1.5**	**1.5**	**1.3**	**1.5**	*1.5*	*1.5*
Total OECD	**16.2**	**16.8**	**17.6**	**18.0**	**17.9**	**17.8**	**17.7**	**17.0**	**17.0**	**17.5**	**17.8**	**17.8**	**18.6**	*19.0*	*19.2*
Non-OECD															
OPEC	**19.9**	**18.5**	**18.5**	**17.3**	**19.5**	**19.7**	**21.6**	**23.5**	**24.5**	**25.0**	**26.2**	**27.3**	**27.5**	*27.7*	*28.2*
Former Soviet Union	**12.2**	**12.3**	**12.2**	**11.9**	**12.3**	**12.5**	**12.5**	**12.1**	**11.4**	**10.4**	**8.9**	**8.1**	**7.0**	*6.6*	*6.2*
China	**2.0**	**2.1**	**2.3**	**2.5**	**2.6**	**2.7**	**2.7**	**2.8**	**2.8**	**2.8**	**2.8**	**2.9**	**2.9**	*3.0*	*3.0*
Mexico	**3.0**	**3.0**	**3.1**	**3.0**	**2.8**	**2.9**	**2.9**	**2.9**	**3.0**	**3.2**	**3.2**	**3.2**	**3.2**	*3.2*	*3.2*
Other Non-OECD	**4.9**	**9.5**	**5.9**	**6.4**	**6.7**	**6.8**	**7.2**	**7.5**	**7.7**	**7.8**	**8.1**	**8.4**	**8.8**	*9.1*	*9.3*
Total Non-OECD	**42.0**	**41.3**	**42.0**	**41.2**	**43.9**	**44.6**	**47.0**	**48.9**	**49.4**	**49.2**	**49.2**	**49.8**	**49.5**	*49.5*	*50.0*
Total World Supply	**58.2**	**58.1**	**59.6**	**59.3**	**61.8**	**62.4**	**64.7**	**65.9**	**66.4**	**66.7**	**66.9**	**67.6**	**68.1**	*68.5*	*69.2*
Total Stock Withdrawals	**1.2**	**0.4**	**-0.2**	**0.3**	**-0.9**	**-0.1**	**-0.4**	**-0.2**	**-0.4**	**-0.1**	**-0.1**	**-0.3**	**-0.2**	*-0.1*	*0.0*
Statistical Discrepancy	**0.1**	**0.3**	**0.4**	**0.5**	**0.9**	**0.7**	**0.6**	**0.4**	**0.1**	**0.2**	**-0.1**	**-0.7**	**-0.4**	*0.2*	*0.5*
Closing Stocks (billion barrels) [e]	**4.9**	**4.8**	**4.8**	**4.7**	**5.1**	**5.1**	**5.2**	**5.3**	**5.4**	**5.5**	**5.5**	**5.7**	**5.7**	*5.8*	*5.7*
Net Exports from Former Soviet Union	**3.2**	**3.4**	**3.3**	**3.0**	**3.4**	**3.5**	**3.6**	**3.4**	**3.0**	**2.1**	**2.1**	**2.3**	**2.1**	*2.1*	*2.1*

[a]Demand for petroleum by the OECD countries is synonymous with "petroleum product supplied" which is defined in the glossary of the EIA *Petroleum Supply Monthly,* DOE/EIA-0109. Demand for petroleum by the non-OECD countries is "apparent consumption" which includes internal consumption, refinery fuel and loss, and bunkering.

[b]OECD Europe includes the former East Germany.

[c]Includes production of crude oil (including lease condensates), natural gas plant liquids, other hydrogen and hydrocarbons for refinery feedstocks, refinery gains, alcohol, and liquids produced from coal and other sources.

[d]Includes offshore supply from Denmark, Germany, the Netherlands, Norway, and the United Kingdom.

[e]Excludes stocks held in the Former CPEs.

OECD: Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. Mexico is also a member, but OECD data does not yet include Mexico.

OPEC: Organization of Petroleum Exporting Countries: Algeria, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

SPR: Strategic Petroleum Reserve

Former Soviet Union: Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

Notes: Minor discrepancies with other published EIA historical data are due to rounding. Historical data are printed in bold, forecasts are in italic. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Energy Information Administration, *International Petroleum Statistics Report*, DOE/EIA-0520(95/06); and *International Energy Annual 1992*, DOE/EIA-0219(92); Organization for Economic Cooperation and Development, Annual and Monthly Oil Statistics Database, March 1995.

Table A4. Annual Average U.S. Energy Prices
(Nominal Dollars)

	Year														
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Imported Crude Oil [a] (dollars per barrel)	**33.55**	**29.30**	**28.88**	**26.99**	**14.00**	**18.13**	**14.57**	**18.08**	**21.75**	**18.70**	**18.20**	**16.15**	**15.52**	17.17	17.75
Natural Gas Wellhead (dollars per thousand cubic feet)	**2.46**	**2.59**	**2.65**	**2.51**	**1.94**	**1.66**	**1.69**	**1.69**	**1.71**	**1.64**	**1.74**	**2.03**	**1.82**	1.68	1.88
Petroleum Product															
Gasoline Retail [b] (dollars per gallon)	**1.28**	**1.22**	**1.20**	**1.20**	**0.93**	**0.96**	**0.96**	**1.06**	**1.22**	**1.20**	**1.19**	**1.17**	**1.17**	1.21	1.25
No. 2 Diesel Oil, Retail (dollars per gallon)	**NA**	**1.14**	**1.15**	**1.15**	**0.88**	**0.93**	**0.91**	**0.99**	**1.16**	**1.13**	**1.10**	**1.11**	**1.11**	1.13	1.18
No. 2 Heating Oil, Wholesale (dollars per gallon)	**NA**	**0.81**	**0.82**	**0.78**	**0.49**	**0.53**	**0.47**	**0.56**	**0.70**	**0.62**	**0.58**	**0.54**	**0.51**	0.50	0.55
No. 2 Heating Oil, Retail (dollars per gallon)	**NA**	**NA**	**1.09**	**1.05**	**0.84**	**0.80**	**0.81**	**0.90**	**1.06**	**1.02**	**0.93**	**0.91**	**0.88**	0.88	0.96
No. 6 Residual Fuel Oil, Retail [c] (dollars per barrel)	**28.40**	**27.33**	**28.89**	**25.57**	**14.46**	**17.76**	**14.04**	**16.20**	**18.66**	**14.32**	**14.21**	**14.00**	**14.78**	17.41	17.00
Electric Utility Fuel															
Coal (dollars per million Btu)	**1.65**	**1.65**	**1.66**	**1.65**	**1.58**	**1.51**	**1.47**	**1.44**	**1.45**	**1.45**	**1.41**	**1.38**	**1.36**	1.34	1.34
Heavy Fuel Oil [d] (dollars per million Btu)	**4.84**	**4.57**	**4.81**	**4.26**	**2.40**	**2.98**	**2.41**	**2.85**	**3.22**	**2.49**	**2.46**	**2.36**	**2.40**	2.93	2.89
Natural Gas (dollars per million Btu)	**3.38**	**3.47**	**3.58**	**3.43**	**2.35**	**2.24**	**2.26**	**2.36**	**2.32**	**2.15**	**2.33**	**2.56**	**2.23**	2.03	2.26
Other Residential															
Natural Gas (dollars per thousand cubic feet)	**5.05**	**6.04**	**6.12**	**6.12**	**5.83**	**5.55**	**5.47**	**5.64**	**5.80**	**5.82**	**5.89**	**6.16**	**6.41**	6.32	6.55
Electricity (cents per kilowatthour)	**6.8**	**7.2**	**7.6**	**7.8**	**7.4**	**7.4**	**7.5**	**7.6**	**7.8**	**8.1**	**8.2**	**8.3**	**8.4**	8.6	8.8

[a]Cost of imported crude oil to U.S.
[b]Average for all grades and services.
[c]Average for all sulfur contents.
[d]Includes fuel oils No. 4, No. 5, and No. 6 and topped crude fuel oil prices.

Notes: Data are estimated for the first quarter of 1995. Prices exclude taxes, except prices for gasoline, residential natural gas, and diesel. Price cases are derived by simulating all energy product price models under the assumptions of the three world oil price cases using the mid macroeconomic case and normal weather assumptions for all simulations. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(95/06); and *Petroleum Marketing Monthly*, DOE/EIA-0380(95/06).

Table A5. Annual U.S. Petroleum Supply and Demand
(Million Barrels per Day Except Closing Stocks)

	Year														
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Supply															
Crude Oil Supply															
Domestic Production [a]	**8.65**	**8.69**	**8.88**	**8.97**	**8.68**	**8.35**	**8.14**	**7.61**	**7.36**	**7.42**	**7.17**	**6.85**	**6.66**	*6.53*	*6.29*
Alaska	**1.70**	**1.71**	**1.72**	**1.83**	**1.87**	**1.96**	**2.02**	**1.87**	**1.77**	**1.80**	**1.71**	**1.58**	**1.56**	*1.49*	*1.37*
Lower 48	**6.95**	**6.97**	**7.16**	**7.15**	**6.81**	**6.39**	**6.12**	**5.74**	**5.58**	**5.62**	**5.46**	**5.26**	**5.10**	*5.03*	*4.92*
Net Imports (including SPR) [b]	**3.26**	**3.17**	**3.24**	**3.00**	**4.03**	**4.53**	**4.95**	**5.70**	**5.77**	**5.62**	**5.99**	**6.69**	**6.96**	*7.34*	*7.64*
Other SPR Supply	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.02**	**0.00**	*0.01*	*0.01*
Stock Draw (Including SPR)	**-0.14**	**-0.22**	**-0.20**	**-0.05**	**-0.08**	**-0.13**	**0.00**	**-0.09**	**0.03**	**0.04**	**0.00**	**-0.08**	**-0.02**	*0.00*	*-0.01*
Product Supplied and Losses	**-0.06**	**-0.07**	**-0.07**	**-0.06**	**-0.05**	**-0.03**	**-0.04**	**-0.03**	**-0.02**	**-0.02**	**-0.01**	**-0.01**	**-0.01**	*-0.01*	*-0.01*
Unaccounted-for Crude Oil	**0.07**	**0.11**	**0.18**	**0.15**	**0.14**	**0.14**	**0.20**	**0.20**	**0.26**	**0.20**	**0.26**	**0.17**	**0.27**	*0.25*	*0.27*
Total Crude Oil Supply	**11.77**	**11.69**	**12.04**	**12.00**	**12.72**	**12.85**	**13.25**	**13.40**	**13.41**	**13.30**	**13.41**	**13.61**	**13.87**	*14.12*	*14.19*
Other Supply															
NGL Production	**1.52**	**1.56**	**1.63**	**1.61**	**1.55**	**1.59**	**1.62**	**1.55**	**1.56**	**1.66**	**1.70**	**1.74**	**1.73**	*1.74*	*1.73*
Other Hydrocarbon and Alcohol Inputs	**0.07**	**0.08**	**0.08**	**0.11**	**0.11**	**0.12**	**0.11**	**0.11**	**0.13**	**0.15**	**0.20**	**0.25**	**0.26**	*0.32*	*0.34*
Crude Oil Product Supplied	**0.06**	**0.07**	**0.06**	**0.06**	**0.05**	**0.03**	**0.04**	**0.03**	**0.02**	**0.02**	**0.01**	**0.01**	**0.01**	*0.01*	*0.01*
Processing Gain	**0.57**	**0.49**	**0.55**	**0.56**	**0.62**	**0.64**	**0.66**	**0.66**	**0.70**	**0.71**	**0.77**	**0.76**	**0.77**	*0.78*	*0.79*
Net Product Imports [c]	**1.05**	**1.15**	**1.47**	**1.29**	**1.41**	**1.39**	**1.63**	**1.50**	**1.38**	**0.96**	**0.94**	**0.93**	**1.09**	*0.88*	*1.06*
Product Stock Withdrawn or Added (-) [d]	**0.28**	**0.15**	**-0.08**	**0.15**	**-0.12**	**0.09**	**0.03**	**0.13**	**-0.14**	**-0.04**	**0.06**	**-0.05**	**0.00**	*-0.03*	*0.02*
Total Supply	**15.32**	**15.18**	**15.76**	**15.78**	**16.33**	**16.72**	**17.33**	**17.37**	**17.05**	**16.76**	**17.10**	**17.25**	**17.72**	*17.81*	*18.13*
Demand															
Motor Gasoline [e]	**6.45**	**6.55**	**6.69**	**6.78**	**6.94**	**7.19**	**7.36**	**7.40**	**7.31**	**7.23**	**7.38**	**7.48**	**7.60**	*7.78*	*7.90*
Jet Fuel	**1.01**	**1.05**	**1.18**	**1.22**	**1.31**	**1.38**	**1.45**	**1.49**	**1.52**	**1.47**	**1.45**	**1.47**	**1.53**	*1.57*	*1.58*
Distillate Fuel Oil	**2.67**	**2.69**	**2.84**	**2.87**	**2.91**	**2.98**	**3.12**	**3.16**	**3.02**	**2.92**	**2.98**	**3.04**	**3.16**	*3.20*	*3.26*
Residual Fuel Oil	**1.72**	**1.42**	**1.37**	**1.20**	**1.42**	**1.26**	**1.38**	**1.37**	**1.23**	**1.16**	**1.09**	**1.08**	**1.02**	*0.90*	*0.96*
Other Oils [e,f]	**3.46**	**3.53**	**3.68**	**3.71**	**3.75**	**3.90**	**4.03**	**3.95**	**3.95**	**3.99**	**4.20**	**4.17**	**4.41**	*4.37*	*4.43*
Total Demand [e]	**15.31**	**15.24**	**15.76**	**15.78**	**16.33**	**16.72**	**17.34**	**17.37**	**17.04**	**16.77**	**17.10**	**17.24**	**17.72**	*17.81*	*18.13*
Total Petroleum Net Imports	**4.31**	**4.31**	**4.71**	**4.29**	**5.44**	**5.92**	**6.59**	**7.20**	**7.15**	**6.58**	**6.94**	**7.62**	**8.05**	*8.22*	*8.69*
Closing Stocks (million barrels)															
Crude Oil (excluding SPR) [g]	**350**	**344**	**345**	**321**	**331**	**349**	**330**	**341**	**323**	**325**	**318**	**335**	**337**	*335*	*335*
Total Motor Gasoline	**235**	**222**	**243**	**223**	**233**	**226**	**228**	**213**	**220**	**219**	**216**	**226**	**215**	*221*	*222*
Jet Fuel	**37**	**39**	**42**	**40**	**50**	**50**	**44**	**41**	**52**	**49**	**43**	**40**	**47**	*46*	*48*
Distillate Fuel Oil	**179**	**140**	**161**	**144**	**155**	**134**	**124**	**106**	**132**	**144**	**141**	**141**	**145**	*141*	*139*
Residual Fuel Oil	**66**	**49**	**53**	**50**	**47**	**47**	**45**	**44**	**49**	**50**	**43**	**44**	**42**	*44*	*42*
Other Oils [h]	**270**	**281**	**261**	**247**	**265**	**260**	**267**	**257**	**261**	**267**	**263**	**273**	**275**	*281*	*277*

[a]Includes lease condensate.
[b]Net imports equals gross imports plus SPR imports minus exports.
[c]Includes finished petroleum products, unfinished oils, gasoline blending components, and natural gas plant liquids for processing.
[d]Includes an estimate of minor product stock change based on monthly data.
[e]For years prior to 1993, motor gasoline includes an estimate of fuel ethanol blended into gasoline and certain product reclassifications, not reported elsewhere in EIA. See Appendix B in Energy Information Administration, Short-Term Energy Outlook, EIA/DOE-0202(93/3Q), for details on this adjustment.
[f]Includes crude oil product supplied, natural gas liquids, liquefied refinery gas, other liquids, and all finished petroleum products except motor gasoline, jet fuel, distillate, and residual fuel oil.
[g]Includes crude oil in transit to refineries.
[h]Includes stocks of all other oils such as aviation gasoline, kerosene, natural gas liquids (including ethane), aviation gasoline blending components, naphtha and other oils for petrochemical feedstock use, special naphthas, lube oils, wax, coke, asphalt, road oil, and miscellaneous oils.
SPR: Strategic Petroleum Reserve
NGL: Natural Gas Liquids
Notes: Minor discrepancies with other EIA published historical data are due to rounding. Historical data are printed in bold, forecasts are in italic. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.
Sources: Historical data: Energy Information Administration, *Petroleum Supply Monthly*, DOE/EIA-0109(93/01-95/06); and *Weekly Petroleum Status Report*, DOE/EIA-0208(various issues).

Table A6. Annual U.S. Natural Gas Supply and Demand
(Trillion Cubic Feet)

	Year														
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Supply															
Total Dry Gas Production [a]	**17.82**	**16.09**	**17.47**	**16.45**	**16.06**	**16.62**	**17.10**	**17.31**	**17.81**	**17.70**	**17.84**	**18.24**	**18.85**	*18.85*	*19.34*
Net Imports	**0.88**	**0.86**	**0.79**	**0.89**	**0.69**	**0.94**	**1.22**	**1.27**	**1.45**	**1.64**	**1.92**	**2.21**	**2.40**	*2.56*	*2.75*
Supplemental Gaseous Fuels	**0.15**	**0.13**	**0.11**	**0.13**	**0.11**	**0.10**	**0.10**	**0.11**	**0.12**	**0.11**	**0.12**	**0.12**	**0.13**	*0.13*	*0.12*
Total New Supply	**18.85**	**17.09**	**18.36**	**17.47**	**16.86**	**17.66**	**18.42**	**18.69**	**19.38**	**19.45**	**19.88**	**20.57**	**21.37**	*21.54*	*22.20*
Underground Working Gas Storage															
Opening	**6.57**	**6.88**	**6.44**	**6.71**	**6.45**	**6.57**	**6.55**	**6.65**	**6.33**	**6.94**	**6.78**	**6.64**	**6.65**	*6.97*	*6.84*
Closing	**6.88**	**6.44**	**6.71**	**6.45**	**6.57**	**6.55**	**6.65**	**6.33**	**6.94**	**6.78**	**6.64**	**6.65**	**6.97**	*6.84*	*6.90*
Net Withdrawals	**-0.31**	**0.44**	**-0.26**	**0.26**	**-0.12**	**0.02**	**-0.10**	**0.33**	**-0.61**	**0.16**	**0.14**	**-0.01**	**-0.32**	*0.13*	*-0.06*
Total Supply [a]	**18.54**	**17.53**	**18.10**	**17.73**	**16.74**	**17.68**	**18.32**	**19.02**	**18.77**	**19.61**	**20.02**	**20.56**	**21.06**	*21.66*	*22.14*
Balancing Item [b]	**-0.54**	**-0.69**	**-0.15**	**-0.45**	**-0.52**	**-0.47**	**-0.29**	**-0.22**	**-0.05**	**-0.58**	**-0.47**	**-0.27**	**-0.33**	*-0.37*	*-0.30*
Total Primary Supply [a]	**18.00**	**16.83**	**17.95**	**17.28**	**16.22**	**17.21**	**18.03**	**18.80**	**18.72**	**19.03**	**19.54**	**20.29**	**20.73**	*21.30*	*21.84*
Demand															
Lease and Plant Fuel	**1.11**	**0.98**	**1.08**	**0.97**	**0.92**	**1.15**	**1.10**	**1.07**	**1.24**	**1.13**	**1.17**	**1.18**	**1.24**	*1.24*	*1.24*
Pipeline Use	**0.60**	**0.49**	**0.53**	**0.50**	**0.49**	**0.52**	**0.61**	**0.63**	**0.66**	**0.60**	**0.59**	**0.62**	**0.64**	*0.66*	*0.66*
Residential	**4.63**	**4.38**	**4.56**	**4.43**	**4.31**	**4.31**	**4.63**	**4.78**	**4.39**	**4.56**	**4.69**	**4.96**	**4.87**	*4.80*	*5.05*
Commercial	**2.61**	**2.43**	**2.52**	**2.43**	**2.32**	**2.43**	**2.67**	**2.72**	**2.62**	**2.73**	**2.80**	**2.86**	**2.94**	*2.97*	*3.15*
Industrial (Incl. Nonutilities)	**5.83**	**5.64**	**6.15**	**5.90**	**5.58**	**5.95**	**6.38**	**6.82**	**7.02**	**7.23**	**7.53**	**7.99**	**8.05**	*8.49*	*8.62*
Cogenerators [c]	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**1.12**	**1.30**	**1.45**	**1.68**	**1.85**	**2.00**	*2.10*	*2.28*
Other Nonutil. Gen. [c]	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**0.06**	**0.09**	**0.12**	**0.17**	**0.17**	**0.18**	*0.19*	*0.21*
Electric Utilities	**3.23**	**2.91**	**3.11**	**3.04**	**2.60**	**2.84**	**2.64**	**2.79**	**2.79**	**2.79**	**2.77**	**2.68**	**2.99**	*3.13*	*3.12*
Total Demand	**18.00**	**16.83**	**17.95**	**17.28**	**16.22**	**17.21**	**18.03**	**18.80**	**18.72**	**19.03**	**19.54**	**20.29**	**20.73**	*21.30*	*21.84*

[a]Excludes nonhydrocarbon gases removed.
[b]The balancing item represents the difference between the sum of the components of natural gas supply and the sum of components of natural gas demand.
[c]Nonutility gas consumption data and projections provided by the office of Coal, Nuclear, Electric and Alternate Fuels, Energy Information Administration.

Notes: Minor discrepancies with other EIA published historical data are due to rounding. Historical data are printed in bold, forecasts are in italic. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(95/06); *Natural Gas Monthly*, DOE/EIA-0130(95/06); *Electric Power Monthly*, DOE/EIA-0226(95/05); Form EIA-867, "Annual Nonutility Power Producer Report."

Table A7. Annual U.S. Coal Supply and Demand
(Million Short Tons)

	Year														
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Supply															
Production	**838.1**	**782.1**	**895.9**	**883.6**	**890.3**	**918.8**	**950.3**	**980.7**	**1029.1**	**996.0**	**997.5**	**945.4**	**1030.6**	*1037.0*	*1046.1*
Primary Stock Levels [a]															
Opening	**24.1**	**36.8**	**33.9**	**34.1**	**33.1**	**32.1**	**28.3**	**30.4**	**29.0**	**33.4**	**33.0**	**34.0**	**25.3**	*33.2*	*35.0*
Closing	**36.8**	**33.9**	**34.1**	**33.1**	**32.1**	**28.3**	**30.4**	**29.0**	**33.4**	**33.0**	**34.0**	**25.3**	**33.2**	*35.0*	*36.0*
Net Withdrawals	**-12.6**	**2.9**	**-0.2**	**1.0**	**1.0**	**3.8**	**-2.1**	**1.4**	**-4.4**	**0.4**	**-1.0**	**8.7**	**-7.9**	*-1.8*	*-1.0*
Imports	**0.7**	**1.3**	**1.3**	**2.0**	**2.2**	**1.7**	**2.1**	**2.9**	**2.7**	**3.4**	**3.8**	**7.3**	**7.6**	*7.7*	*7.9*
Exports	**106.3**	**77.8**	**81.5**	**92.7**	**85.5**	**79.6**	**95.0**	**100.8**	**105.8**	**109.0**	**102.5**	**74.5**	**71.4**	*78.5*	*84.3*
Total Net Domestic Supply	**719.9**	**708.4**	**815.6**	**793.9**	**808.0**	**844.7**	**855.3**	**884.2**	**921.6**	**890.9**	**897.8**	**886.9**	**958.9**	*964.5*	*968.7*
Secondary Stock Levels [b]															
Opening	**185.3**	**195.3**	**168.7**	**197.2**	**170.2**	**175.2**	**185.5**	**158.4**	**146.1**	**168.2**	**167.7**	**163.7**	**120.5**	*136.1*	*154.0*
Closing	**195.3**	**168.7**	**197.2**	**170.2**	**175.2**	**185.5**	**158.4**	**146.1**	**168.2**	**167.7**	**163.7**	**120.5**	**136.1**	*154.0*	*161.9*
Net Withdrawals	**-10.0**	**26.6**	**-28.6**	**27.0**	**-5.0**	**-10.2**	**27.0**	**12.3**	**-22.1**	**0.5**	**4.0**	**43.2**	**-15.6**	*-17.9*	*-7.9*
Total Supply	**710.0**	**735.0**	**787.0**	**820.8**	**803.1**	**834.4**	**882.3**	**896.5**	**899.4**	**891.4**	**901.8**	**930.2**	**943.3**	*946.5*	*960.8*
Demand															
Coke Plants	**40.9**	**37.0**	**44.0**	**41.1**	**35.9**	**37.0**	**41.9**	**40.5**	**38.9**	**33.9**	**32.4**	**31.3**	**31.7**	*32.2*	*31.9*
Electricity Production															
Electric Utilities	**593.7**	**625.2**	**664.4**	**693.8**	**685.1**	**717.9**	**758.4**	**766.9**	**773.5**	**772.3**	**779.9**	**813.5**	**817.3**	*821.7*	*834.7*
Nonutilities (Excl. Cogen.)	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**5.7**	**8.4**	*10.7*	*13.1*
Retail and General Industry [c]	**72.3**	**74.4**	**82.9**	**83.2**	**83.3**	**82.1**	**83.4**	**82.3**	**83.1**	**81.5**	**80.2**	**81.1**	**81.0**	*81.1*	*81.1*
Total Demand [d]	**706.9**	**736.7**	**791.3**	**818.0**	**804.2**	**836.9**	**883.6**	**889.7**	**895.5**	**887.6**	**892.4**	**931.7**	**938.4**	*945.7*	*960.8*
Discrepancy [e]	**3.1**	**-1.6**	**-4.3**	**2.8**	**-1.2**	**-2.5**	**-1.3**	**6.8**	**3.9**	**3.7**	**9.4**	**-1.5**	**4.9**	*0.9*	*S*

[a]Primary stocks are held at the mines, preparation plants, and distribution points.
[b]Secondary stocks are held by users.
[c]Synfuels plant demand in 1993 was 1.7 million tons per quarter, and is assumed to remain at that level in 1994, 1995, and 1996.
[d]Total excludes any shipments to independent power producers not calculated in Retail and General Industry for years prior to 1993.
[e]Historical period discrepancy reflects an unaccounted-for shipper and receiver reporting difference, plus any shipment to independent power producers not captured in Retail and General Industry.
(S) indicates amounts of less than 50,000 tons.
Notes: Rows and columns may not add due to independent rounding. Historical data are printed in bold, forecasts are in italic. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.
Sources: Historical data: Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(95/06); and *Quarterly Coal Report*, DOE/EIA-0121(95/1Q), and Form EIA-867, "Annual Nonutility Power Producer Report."

Table A8. Annual U.S. Electricity Supply and Demand
(Billion Kilowatthours)

	Year														
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Supply															
Net Utility Generation															
Coal	**1192.0**	**1259.4**	**1341.7**	**1402.1**	**1385.8**	**1463.8**	**1540.7**	**1553.7**	**1559.6**	**1551.2**	**1575.9**	**1639.2**	**1635.5**	*1650.4*	*1672.7*
Petroleum	**146.8**	**144.5**	**119.8**	**100.2**	**136.6**	**118.5**	**148.9**	**158.3**	**117.0**	**111.5**	**88.9**	**99.5**	**91.0**	*72.4*	*78.7*
Natural Gas	**305.3**	**274.1**	**297.4**	**291.9**	**248.5**	**272.6**	**252.8**	**266.6**	**264.1**	**264.2**	**263.9**	**258.9**	**291.1**	*298.2*	*294.8*
Nuclear	**282.8**	**293.7**	**327.6**	**383.7**	**414.0**	**455.3**	**527.0**	**529.4**	**576.9**	**612.6**	**618.8**	**610.3**	**640.4**	*655.7*	*663.6*
Hydroelectric	**309.2**	**332.1**	**321.2**	**281.1**	**290.8**	**249.7**	**222.9**	**265.1**	**279.9**	**275.5**	**239.6**	**265.1**	**243.7**	*284.3*	*280.1*
Geothermal and Other [a]	**5.2**	**6.5**	**8.6**	**10.7**	**11.5**	**12.3**	**12.0**	**11.3**	**10.7**	**10.1**	**10.2**	**9.6**	**8.9**	*7.3*	*8.0*
Subtotal	**2241.2**	**2310.3**	**2416.3**	**2469.8**	**2487.3**	**2572.1**	**2704.3**	**2784.3**	**2808.2**	**2825.0**	**2797.2**	**2882.5**	**2910.7**	*2968.3*	*2997.9*
Nonutility Generation [b]	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**191.5**	**222.0**	**253.6**	**296.0**	**325.2**	**346.6**	*360.5*	*383.9*
Total Generation	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**2975.8**	**3030.2**	**3078.6**	**3093.2**	**3207.8**	**3257.3**	*3328.8*	*3381.9*
Net Imports	**29.3**	**35.3**	**39.7**	**40.9**	**35.9**	**46.3**	**31.8**	**11.0**	**2.0**	**22.3**	**28.3**	**28.4**	**42.4**	*38.0*	*40.4*
Total Supply	**2276.5**	**2358.6**	**2474.0**	**2536.8**	**3739.9**	**4139.3**	**2804.1**	**2986.8**	**3032.1**	**3100.9**	**3121.6**	**3236.2**	**3299.7**	*3366.8*	*3422.3*
Lost and Unaccounted for [c]	**190.1**	**207.7**	**188.2**	**212.8**	**1371.1**	**1682.0**	**226.0**	**231.5**	**206.1**	**217.1**	**226.6**	**236.9**	**234.8**	*237.3*	*239.4*
Demand															
Electric Utility Sales															
Residential	**729.5**	**750.9**	**780.1**	**793.9**	**819.1**	**850.4**	**892.9**	**905.5**	**924.0**	**955.4**	**935.9**	**994.8**	**1005.8**	*1023.3*	*1047.5*
Commercial	**526.4**	**543.8**	**582.6**	**606.0**	**630.5**	**660.4**	**699.1**	**725.9**	**751.0**	**765.7**	**761.3**	**794.6**	**827.3**	*856.3*	*869.7*
Industrial	**744.9**	**776.0**	**837.8**	**836.8**	**830.5**	**858.2**	**896.5**	**925.7**	**945.5**	**946.6**	**972.7**	**977.2**	**992.4**	*1007.4*	*1015.3*
Other	**85.6**	**80.2**	**85.2**	**87.3**	**88.6**	**88.2**	**89.6**	**89.8**	**92.0**	**94.3**	**93.4**	**94.9**	**95.3**	*95.2*	*95.8*
Subtotal	**2086.4**	**2151.0**	**2285.8**	**2324.0**	**2368.8**	**2457.3**	**2578.1**	**2646.8**	**2712.6**	**2762.0**	**2763.4**	**2861.5**	**2920.9**	*2982.2*	*3028.3*
Nonutility Own Use [b]	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**108.5**	**113.5**	**121.8**	**131.6**	**137.8**	**144.0**	*147.4*	*154.7*
Total Demand	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**2755.3**	**2826.0**	**2883.8**	**2895.0**	**2999.3**	**3064.9**	*3129.5*	*3182.9*
Memo:															
Nonutility Sales to Electric Utilities [d]	**6.0**	**13.0**	**18.0**	**26.0**	**1216.7**	**1520.8**	**68.0**	**83.0**	**108.6**	**131.8**	**164.4**	**187.4**	**202.5**	*213.2*	*229.3*

[a]Other includes generation from wind, wood, waste, and solar sources.

[b]For 1989 to 1991, estimates for nonutility generation are estimates made by the Energy Markets and Contingency Information Division, based on Form EIA-867 data. History and Projections for the same items are from the Office of Coal, Nuclear, Electric and Alternate Fuels, Energy Information Administration, based on Form EIA-867 data.

[c]Balancing item, mainly transmission and distribution losses.

[d]Historical data for nonutility sales to electric utilities is from the Energy Information Administration, *Annual Energy Outlook*, DOE/EIA-0389(93), Table 8.1, for 1982 to 1988; from Form EIA-867 for 1989 to 1993.

Notes: Minor discrepancies with other EIA published historical data are due to rounding. Historical data are printed in bold, forecasts are in italic. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(95/06); *Electric Power Monthly*, DOE/EIA-0226(95/05); Form EIA-867 ("Annual Nonutility Power Producer Report"), Projections: Energy Information Administration, Short-Term Integrated Forecasting System database, and Office of Coal, Nuclear, Electric and Alternate Fuels Energy Information Administration.

Text References and Notes

International Oil Demand

[1]Developing world is defined as all countries not included in either the OECD or FSU, and excluding China, which is listed separately.

[2]Latin America is defined as including all of the countries of Central and South America, plus Mexico, but excluding Puerto Rico and the U.S. Virgin Islands.

[3]Energy Information Administration, Office of Energy Markets and End Use, Energy Markets and Contingency Information Division.

International Oil Supply

[4]Excess capacity data by country provided by Energy Information Administration, Energy Markets and Contingency Information Division.

U.S. Oil Supply

[5]Estimate provided by the Energy Information Administration, Reserves and Natural Gas Division.

[6]Estimate provided by the Energy Information Administration, Reserves and Natural Gas Division.

[7]Drilling rig projections provided by the Energy Information Administration, Reserves and Natural Gas Division.

U.S. Energy Prices

[8]Energy Information Administration, *Natural Gas Monthly*, DOE/EIA-0130(95/03), Table 4.

[9]Energy Information Administration, *U.S. Energy Industry Financial Developments: 1995 First Quarter*, DOE/EIA-0543(95/1Q) (Washington, DC, 1995), Tables 2 and 3.

[10]*Reuters's News Service*, July 21, 1995. In the second week of July 1995, the price differential for RFG and conventional gasoline were 3.6 cents for N.Y.H, 4.4 cents for Gulf Coast, and 3.6 cents for L.A. In the second week of April the spot differentials were 1.3, 1.75, and 2.15 cents for NYH, Gulf Coast and L.A. respectively.

[11]Energy Information Administration, *U.S. Energy Industry Financial Developments, 1995 First Quarter*, DOE/EIA-0543 (95/1Q) (Washington, DC), Tables 2 and 3.

[12]*Natural Gas Week*, June 5, 1995, "Composite Average Spot Wellhead Price", p. 4, and June 19, 1995, p. 22.

[13]*Natural Gas Week*, June 5, 1995, "Composite Average Spot Wellhead Price," p. 4, and June 26, 1995, p. 24.

U.S. Natural Gas Demand

[14]Energy Information Administration, *Historical Monthly Energy Review 1973-1992*, DOE/EIA-0035(73-92), Table 4.2.

U.S. Natural Gas Supply

[15]*Natual Gas Week*, July 17, 1995, p. 12.

[16]*Natural Gas Week*, July 3, 1995, p. 16.

[17]Energy Information Administration, Reserves and Natural Gas Division.

Text References and Notes

U.S. Electricity Demand and Supply

[18]Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels.
[19]Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels.

Figure References

The following is a list of references for the figures appearing in this issue of the *Short-Term Energy Outlook*. Except where noted, all data for figures are taken from datasets containing monthly values of each variable depicted, aggregated to quarterly or annual values as required using appropriate weights. The datasets are created by particular runs of the Short-Term Integrated Forecasting System (STIFS) Model, depending on the scenario or set of scenarios depicted. Also, except when noted, all figures refer to the base or "BBB" case. Other cases referred to are: the high world oil price "BHB"; low world oil price "BLB"; severe weather "BBL"; mild weather "BBS"; strong economic growth "HBB"; weak economic growth "LBB"; weak economic growth with high world oil prices "WHB"; and strong economic growth with low world oil prices "PLB."

1. **History:** Import cost: Compiled from monthly data for the refiner acquisition cost of imported crude oil used in publication of Energy Information Administration, *Petroleum Marketing Annual*, DOE/EIA-0487, Table 1 for historical series; for recent values, *Petroleum Marketing Monthly*, DOE/EIA-0380, Table 1; West Texas Intermediate spot price, *Oil and Gas Journal* Database, June 12, 1995. **Projections:** Third quarter 1995 STIFS database, BBB, BLB, and BHB cases; and Energy Information Administration, Office of Energy Markets and End Use, Energy Markets and Contingency Information Division.

2. **History:** Manufacturing Production: Federal Reserve System, Statistical Release G 17; GDP: U.S. Department of Commerce Bureau of Economic Analysis, *National Income and Product Accounts of the U.S.* **Projections:** DRI/McGraw-Hill Forecast CONTROL0695, modified by EIA's Office of Integrated Analysis and Forecasting with STIFS energy price forecasts.

3. **History:** Compiled from annual data used in publication of Energy Information Administration, *International Energy Annual*, DOE/EIA-0219, Table 8 for historical series; for recent values, *International Petroleum Statistics Report*, DOE/EIA-0520, Table 2.4; Energy Information Administration, Office of Energy Markets and End Use, Energy Markets and Contingency Information Administration. **Projections:** Energy Information Administration, Office of Energy Markets and End Use, Energy Markets and Contingency Information Division.

4. **History:** Compiled from annual data used in publication of Energy Information Administration, *International Energy Annual*, DOE/EIA-0219, Table 8 for historical series; for recent values, *International Petroleum Statistics Report*, DOE/EIA-0520, Table 2.4; and Energy Information Administration, Office of Energy Markets and End Use, Energy Markets and Contingency Information Administration. **Projections:** Energy Information Administration, Office of Energy Markets and End Use, Energy Markets and Contingency Information Division.

5. **History:** Compiled from annual data used in publication of Energy Information Administration, *International Petroleum Statistics Report*, DOE/EIA-0520, Table 4.1 for historical series and recent data; and Energy Information Administration, Office of Energy Markets and End Use, Energy Markets and Contingency Information Division. **Projections:** Energy Information Administration, Office of Energy Markets and End Use, Energy Markets and Contingency Information Division.

6. **History:** Compiled from annual data used in publication of Energy Information Administration, *International Petroleum Statistics Report*, DOE/EIA-0520, Table 4.2 for historical series and recent data;

Energy Information Administration, Office of Energy Markets and End Use, Energy Markets and Contingency Information Administration. **Projections:** Energy Information Administration, Office of Energy Markets and End Use, Energy Markets and Contingency Information Division.

7. **History:** Compiled from annual data used in publication of Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035, Table 10.3 for historical series and recent data. **Projections:** Energy Information Administration, Office of Energy Markets and End Use, Energy Markets and Contingency Information Division.

8. **History:** Compiled from annual data used in publication of Energy Information Administration, *International Energy Annual*, DOE/EIA-0219, Table 1; Energy Information Administration, Office of Energy Markets and End Use, Energy Markets and Contingency Information Division. **Projections:** Energy Information Administration, Office of Energy Markets and End Use, Energy Markets and Contingency Information Division.

9. **History:** Compiled from monthly data used in publication of Energy Information Administration, *Petroleum Supply Annual, Volume 1*, DOE/EIA-0340/1, Tables S4 through S10; *Petroleum Supply Monthly,* DOE/EIA-0109, Tables S4 through S10, adjusted in years prior to 1993 for new (1993) reporting basis for fuel ethanol blended into motor gasoline (See *Short-Term Energy Outlook*, DOE/EIA-0202(93/3Q), Appendix B). **Projections:** Third quarter 1995 STIFS database, case "BBB."

10. **History:** Travel: Compiled from monthly data used in the Federal Highway Administration publication, *Traffic Volume Trends*; Demand: Compiled from monthly data used in publication of Energy Information Administration, *Petroleum Supply Annual, Volume 1*, DOE/EIA-0340/1, Table S4 for historical series, adjusted for 1993 reporting basis (see note 9 above); for recent values, *Petroleum Supply Monthly*, DOE/EIA-0109, Table S4; MPG is calculated as Travel (in miles)/Demand (in gallons). **Projections:** Third quarter 1995 STIFS database, case "BBB."

11. **History:** Compiled from monthly data used in publication of Energy Information Administration, *Petroleum Supply Annual, Volume 1*, DOE/EIA-0340/1, Table S1 for historical series; for recent values, *Petroleum Supply Monthly*, DOE/EIA-0109, Table S1. **Projections:** Third quarter 1995 STIFS database, cases "BBB," "WHB," and "PLB;" and EIA's Reserves and Natural Gas Division.

12. **History:** Compiled from monthly data used in publication of Energy Information Administration, *Petroleum Supply Annual, Volume 1*, DOE/EIA-0340/1, Table S1 for historical series; for recent values, *Petroleum Supply Monthly*, DOE/EIA-0109, Table S1. **Projections:** Third quarter 1995 STIFS database, case "BBB." The imports share variable is calculated as the ratio of total net petroleum imports divided by total petroleum demand.

13. **History:** Compiled from monthly data used in publication of Energy Information Administration, *Petroleum Marketing Annual*, DOE/EIA-0487, Table 1, and *Natural Gas Monthly*, DOE/EIA-0130, Table 4, for historical series; for recent values, *Petroleum Marketing Monthly*, DOE/EIA-0380, Table 1. **Projections:** Third quarter 1995 STIFS database.

Figure References

14. **History:** Compiled from monthly data used in publication of Energy Information Administration, *Petroleum Marketing Annual*, DOE/EIA-0487, Tables 2, 4, and, 15, for historical series; for recent values, *Petroleum Marketing Monthly*, DOE/EIA-0380, Tables 2, 4 and 15. **Projections:** Third quarter 1995 STIFS database.

15. **History:** Crude oil cost component: compiled from monthly data used in publication of Energy Information Administration, *Petroleum Marketing Monthly*, DOE/EIA-0380, Table 1; Motor fuel taxes component: Energy Information Administration, *Petroleum Marketing Monthly*, DOE/EIA-0380, Table EN1; regulatory component (oxygenated and reformulated gasoline programs) calculations provided by Tancred C. Lidderdale, Energy Markets and Contingency Information Division, Energy Information Administration. **Projections**: Third quarter 1995 STIFS database.

16. **History:** Compiled from monthly data used in publication of Energy Information Administration, *Petroleum Supply Monthly*, DOE/EIA-0109, Table S5. **Projections:** Third quarter 1995 STIFS database, case "BBB."

17. **History:** Compiled from monthly data used in publication of Energy Information Administration, *Natural Gas Monthly*, DOE/EIA-0130, Table 4, and *Natural Gas Week*, July 3, 1995, p. 8. **Projections:** Third quarter 1995 STIFS database, case "BBB."

18. **History:** Compiled from monthly data used in publication of Energy Information Administration, *Electric Power Monthly*, DOE/EIA-0226, Table 60. **Projections:** Third quarter 1995 STIFS database, case "BBB."

19. **History:** Compiled from monthly data used in publication of Energy Information Administration, *Petroleum Supply Annual, Volume 1*, DOE/EIA-0340/1, Table S1 for historical series adjusted for 1993 reporting basis (see note 9 above); for recent values, *Petroleum Supply Monthly*, DOE/EIA-0109, Table S1. **Projections:** Third quarter 1995 STIFS database, cases "BBB," "BBS," and "BBL."

20. **History:** Compiled from monthly data used in publication of Energy Information Administration, *Petroleum Supply Annual, Volume 1*, DOE/EIA-0340/1, Table S1 for historical series adjusted for 1993 reporting basis (see note 9 above); for recent values, *Petroleum Supply Monthly*, DOE/EIA-0109, Table S1. **Projections:** Third quarter 1995 STIFS database, cases "BBB," "HBB," and "LBB."

21. **History:** Compiled from monthly data used in publication of Energy Information Administration, *Natural Gas Annual, Volume 2*, DOE/EIA-0131, Table 3 for historical series; for recent values, Energy Information Administration, *Natural Gas Monthly*, DOE/EIA-0130. **Projections:** Third quarter 1995 database, case "BBB."

22. **History:** Nonutility Generators, 1989-1993: Energy Information Administration, Form EIA-867 (1993); other volumes compiled from monthly data used in publication of Energy Information Administration, *Natural Gas Annual, Volume 2*, DOE/EIA-0131, Table 3 for historical series; for recent values, Energy Information Administration, *Natural Gas Monthly*, DOE/EIA-0130. **Projections:** Nonutility Generators: Office of Coal, Nuclear, Electric and Alternate Fuels, Energy Information Administration; other volumes: Third quarter 1995 STIFS database, case "BBB."

Figure References

23. **History:** Production and net imports of natural gas compiled from monthly data used in publication of Energy Information Administration, *Natural Gas Annual, Volume 2*, DOE/EIA-0131/2, Table 2 for historical series; for recent production data, *Natural Gas Monthly*, DOE/EIA-0130. **Projections:** Third quarter 1995 STIFS database, case "BBB."

24. **History:** Compiled from monthly data used in publication of Energy Information Administration, *Natural Gas Annual, Volume 2*, DOE/EIA-0131, Table 3 for historical series; for recent values, Energy Information Administration, *Natural Gas Monthly*, DOE/EIA-0130. **Projections:** Third quarter 1995 STIFS database, case "BBB."

25. **History:** Compiled from quarterly data used in publication of Energy Information Administration, *Quarterly Coal Report*, DOE/EIA-0121, Table 45. **Projections:** Third quarter 1995 STIFS database, case "BBB." Note: Nonutility, coke plant, retail and general industry demand for coal is included in "Other."

26. **History:** Compiled from quarterly data used in publication of Energy Information Administration, *Quarterly Coal Report*, DOE/EIA-0121, Table 1. **Projections:** Third quarter 1995 STIFS database, case "BBB"; and Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels.

27. **History:** Compiled from monthly data used in publication of Energy Information Administration, *Electric Power Monthly* , DOE/EIA-0226, Table 51. **Projections:** Third quarter 1995 STIFS database, case "BBB."

28. **History:** Compiled from monthly data used in publication of Energy Information Administration, *Electric Power Monthly* , DOE/EIA-0226, Table 3 and Form EIA-759. **Projections:** Third quarter 1995 STIFS database, case "BBB"; and Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels for hydroelectric and nuclear power forecasts.

29. **History:** Compiled from data used in publication of Energy Information Administration, *Annual Energy Review*, DOE/EIA-0384, Table 10.1; Third quarter 1995 STIFS database, and Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels. **Projections:** Third quarter 1995 STIFS database and Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels.

30. **History:** Compiled from data used in publication of Energy Information Administration, *Annual Energy Review*, DOE/EIA-0384, Table 10.1; and Second quarter 1995 STIFS database and Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels. **Projections:** Third quarter 1995 STIFS database and Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels.

Appendix A

Computation of Petroleum Demand Sensitivities

Table 8 summarizes the response of forecasts of U.S. total petroleum demand to changes in assumptions for economic growth, world crude oil prices, and weather. The values in this table are computed using the Short-Term Integrated Forecasting Model (STIFS). The STIFS model is documented in EIA's *Short-Term Integrated Forecasting System: 1993 Model Documentation Report* (DOE/EIA-M041, May 1993). The purpose of the model is to generate forecasts of U.S. energy supply, demand, and prices. Key inputs include assumptions for the imported price of crude oil, the rate of U.S. economic growth, and weather (cooling and heating degree-days). Forecasts are generated for production, imports, exports, demand, and prices for refined petroleum products, natural gas, coal, and electricity.

A key relationship between petroleum demand and economic activity is shown in Table 8. Gross domestic product (GDP) is varied from low to high for each of the two projection years, and the resulting change in petroleum demand is calculated. For each of the 2 years, the percentage difference in GDP is computed as the difference between the low and high case levels shown in Table 8, divided by the midpoint of this range. Thus, the percentage difference in GDP for 1995 is as follows: (5501 - 5486) / ((5501 + 5486) / 2), or 0.3 percent. For each period, the petroleum demand difference (in million barrels per day) is divided by the percentage difference in GDP. For 1995, the average petroleum demand difference is 28,000 barrels per day; thus, a 1-percent change in GDP corresponds to a change in demand of (28,000/0.3), or 93,000 barrels per day. For 1996, a 3.1-percent change in GDP corresponds to a change in demand of 365,000 barrels per day; thus, a 1-percent change in GDP corresponds to a demand change of 118,000 barrels per day. The average of the 1995 and 1996 results (weighting the 1995 results by 184 days and the 1996 results by 366 days) is 110,000 barrels per day per 1 percent difference in GDP. Table 8 also shows the differences in petroleum demand due to changes in energy prices caused by varying the world crude oil price. The change in petroleum demand (in million barrels per day) is divided by the change in the crude oil price (in dollars per barrel), and the result is averaged over the two projection years to get an estimate of the change in petroleum demand per dollar of change in the crude oil price.

The influence of weather on petroleum demand is also calculated, using the mid-case values for economic activity and imported crude oil prices. The percentage changes in heating or cooling degree-days are computed and divided by the changes in petroleum demand, and the result is averaged over the two projection periods to get an estimate of the change in petroleum demand per 1-percent change in heating and cooling degree-days. The changes in demand due to changes in heating degree-days apply only to the heating season, roughly the first and fourth quarters of the year, while the changes in demand due to changes in cooling degree-days apply only to the cooling season, roughly the second and third quarters of the year.